

FIG. 1

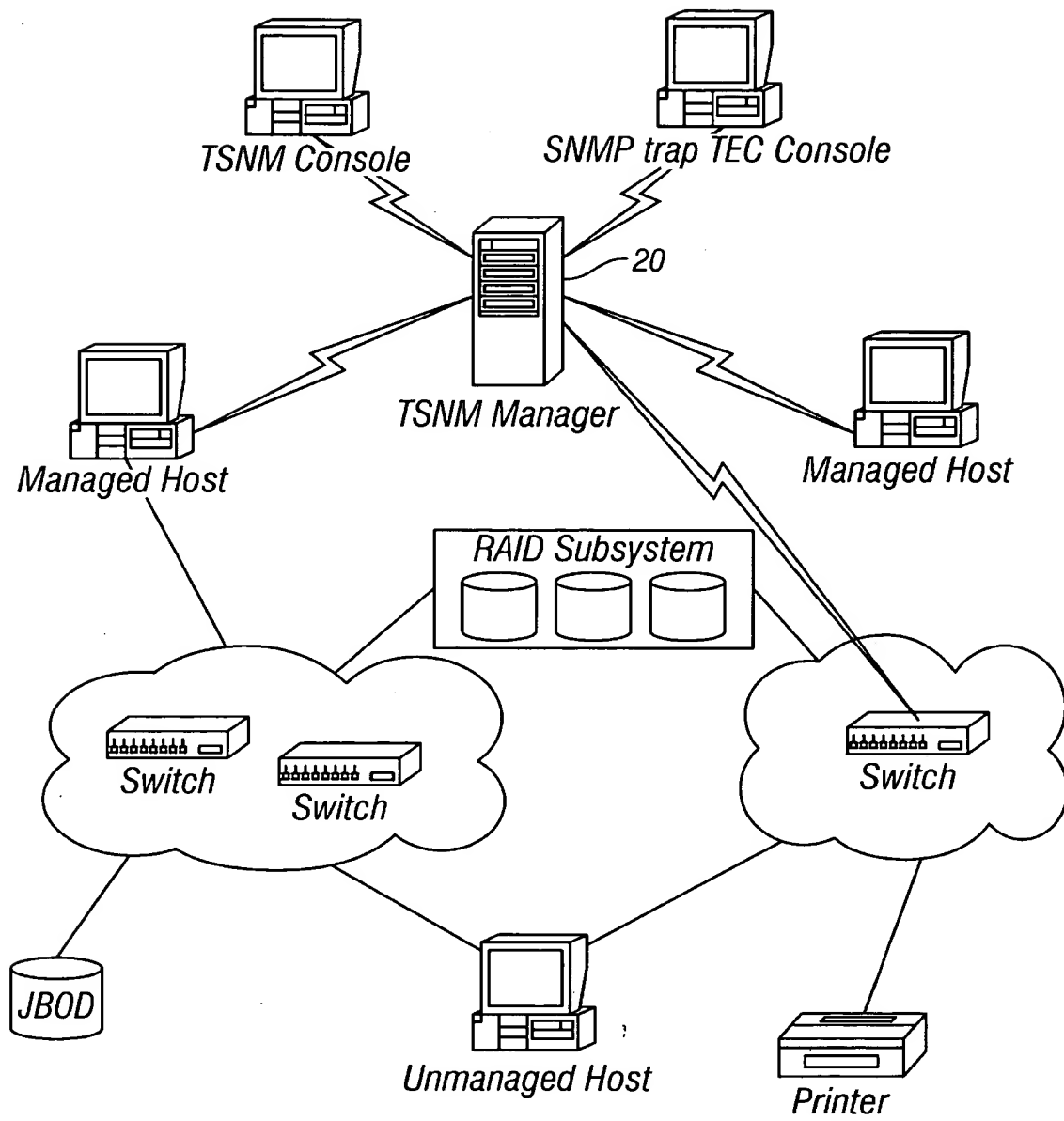


FIG. 2

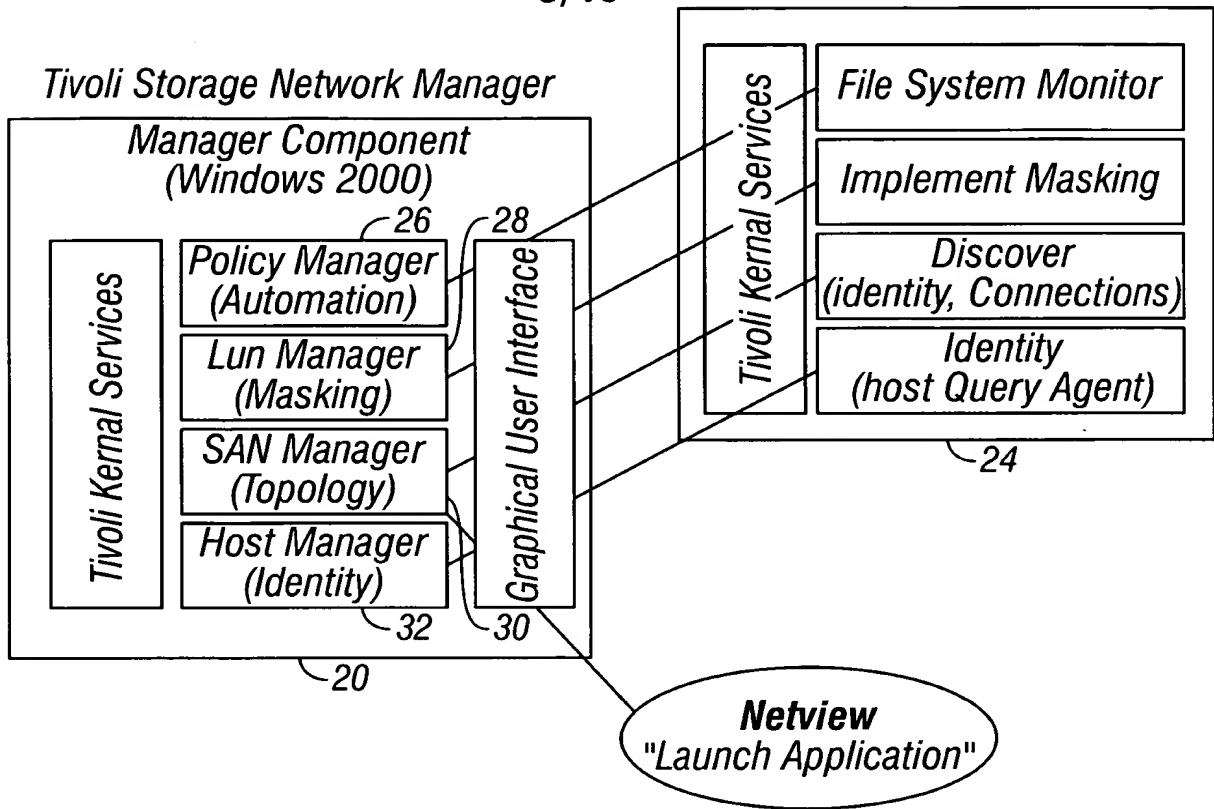


FIG. 3

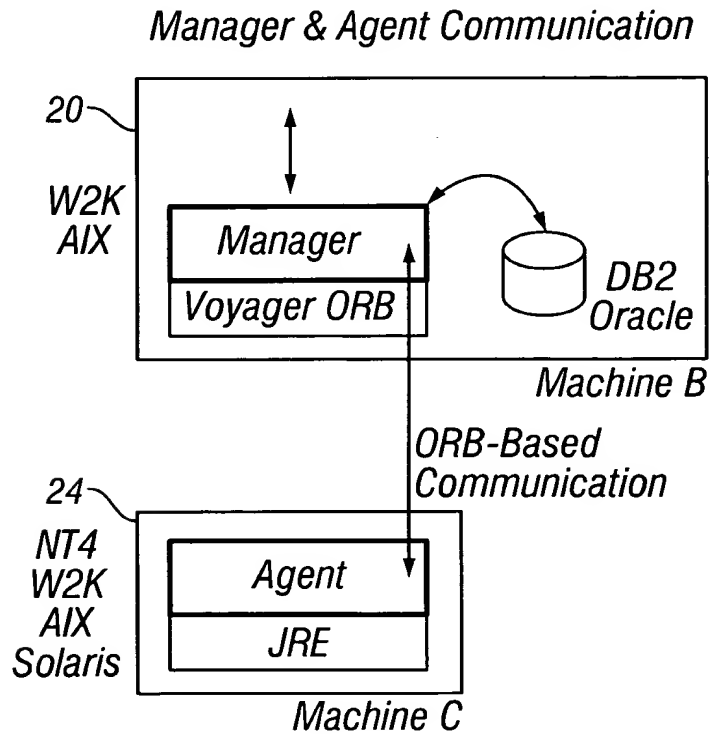


FIG. 4

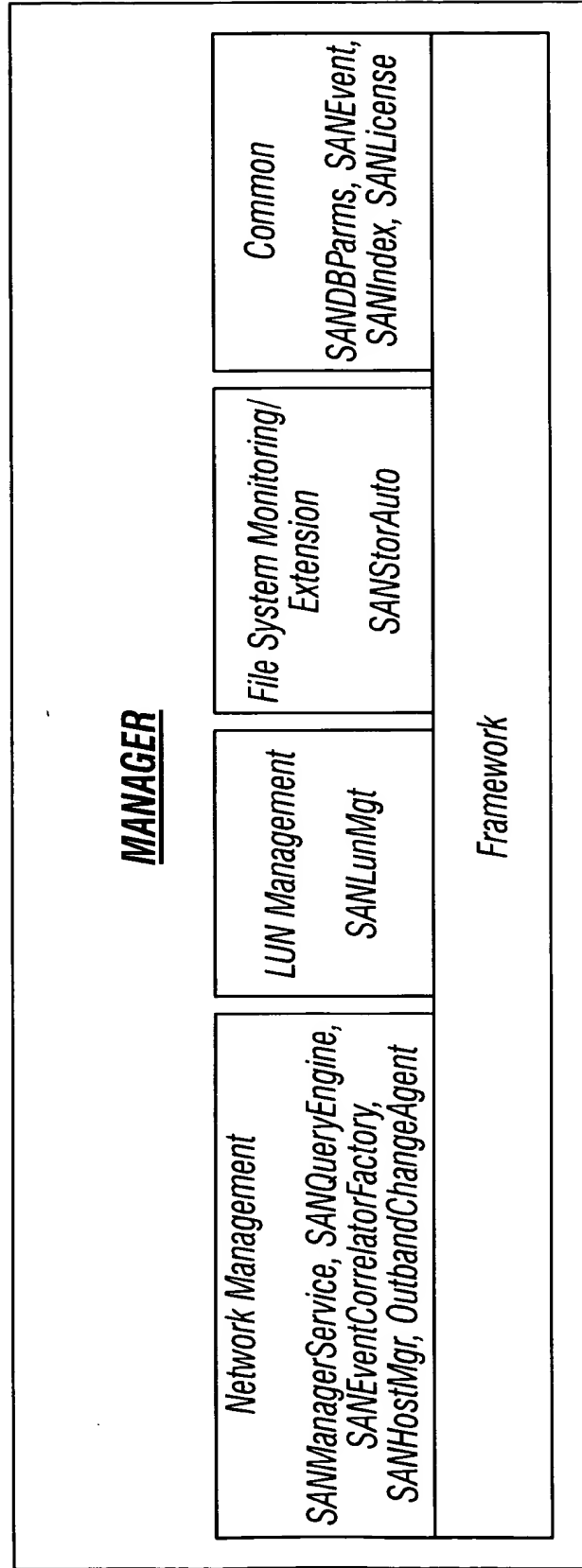


FIG. 5

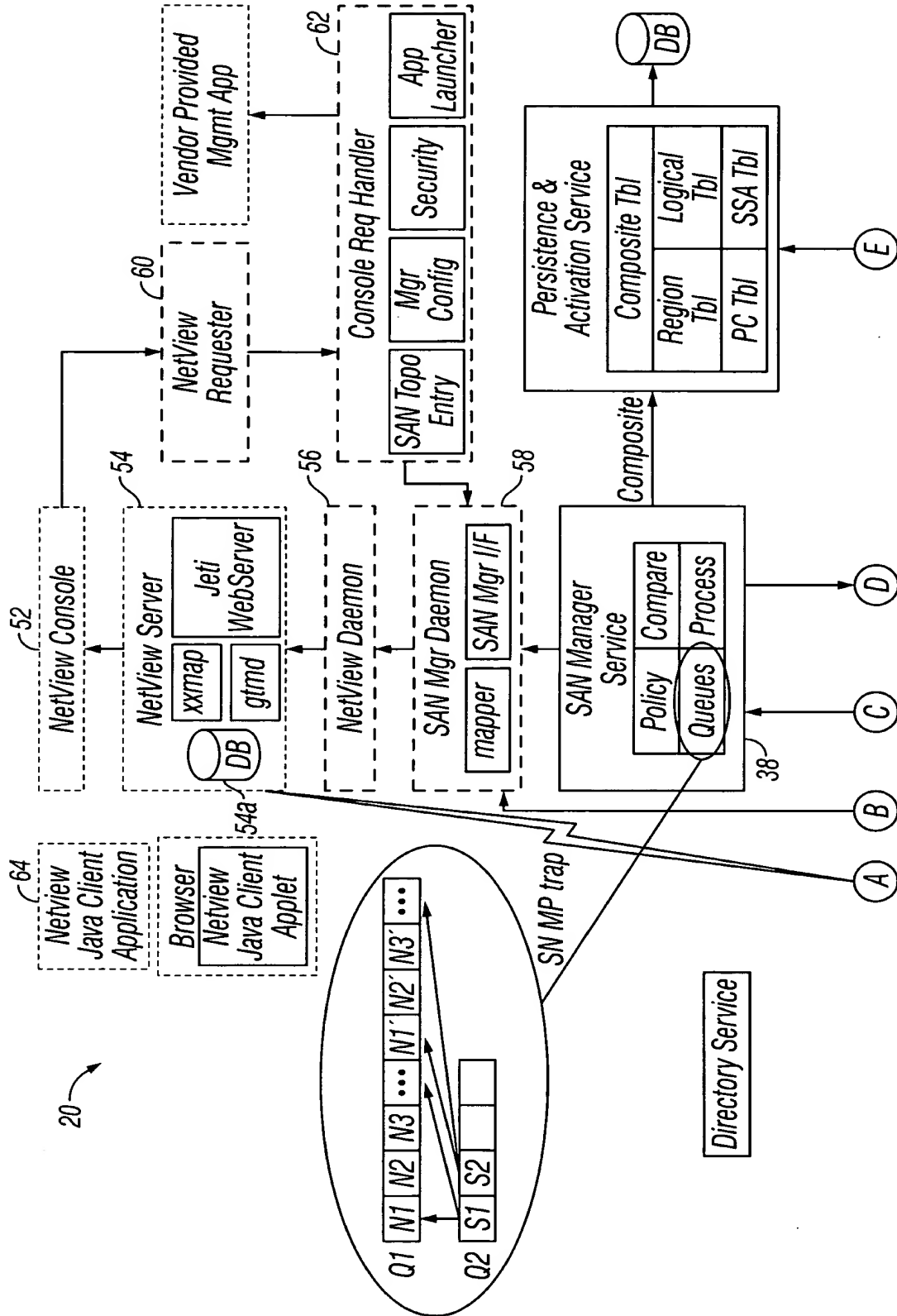


FIG. 6A

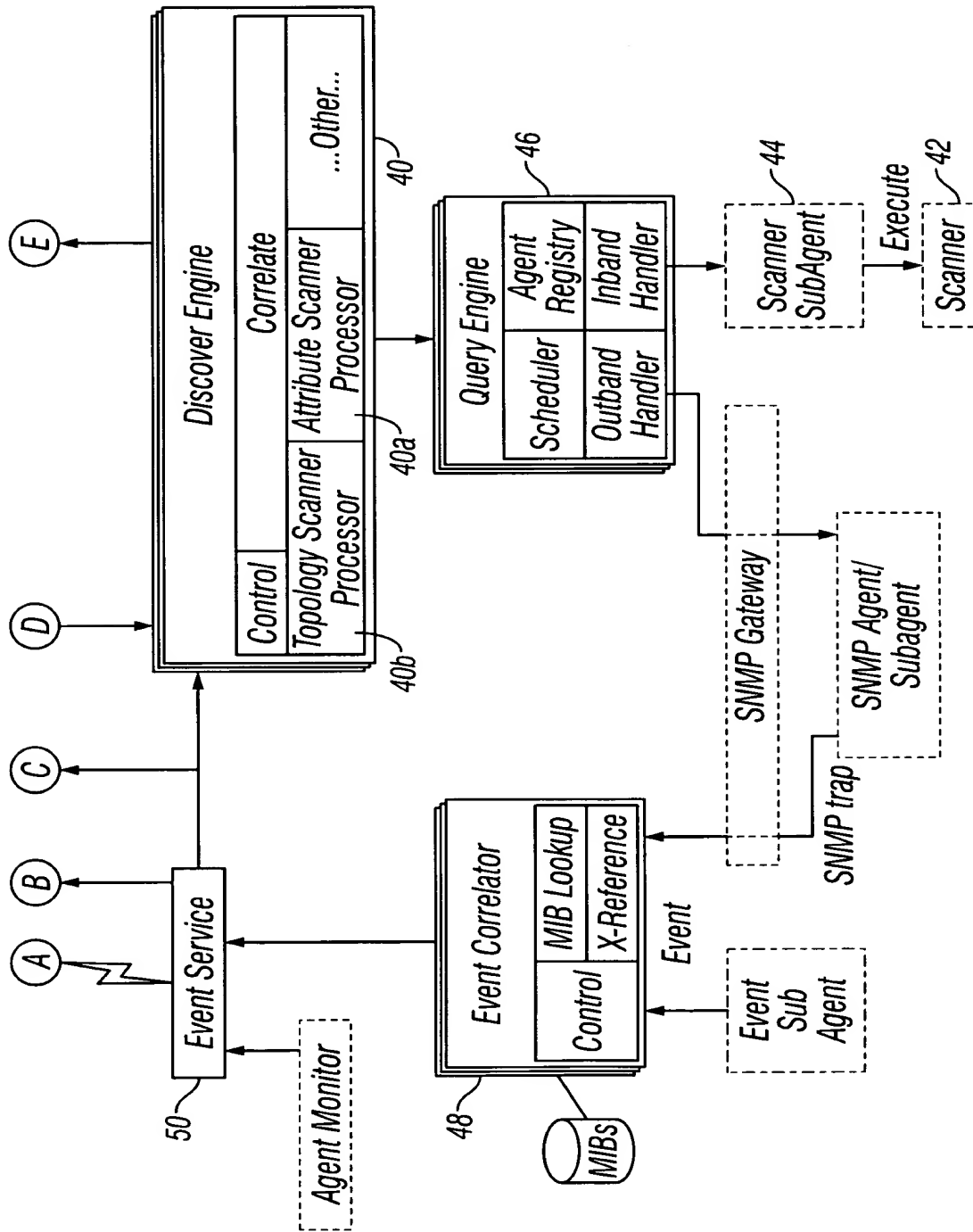


FIG. 6B

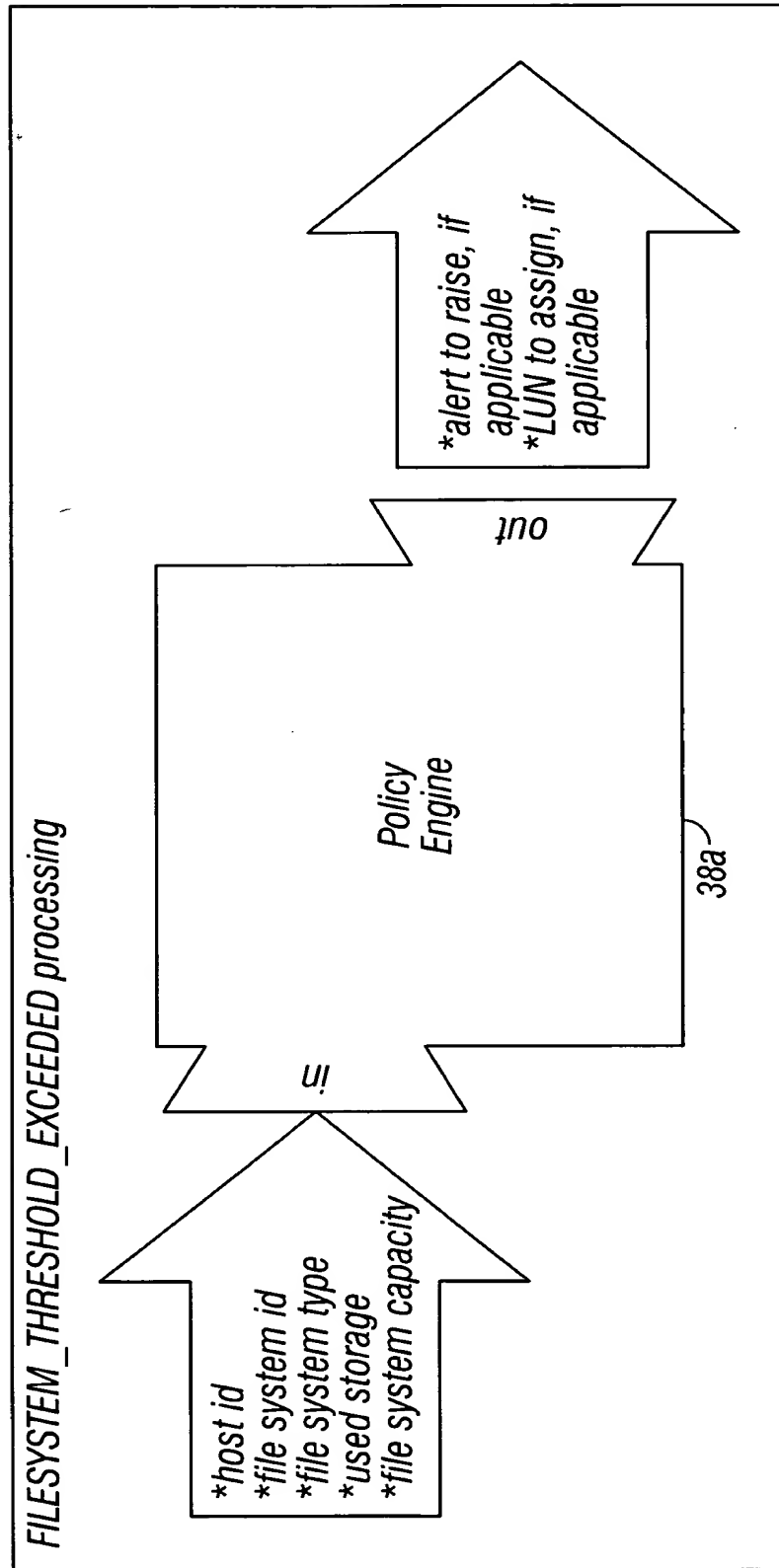


FIG. 7A

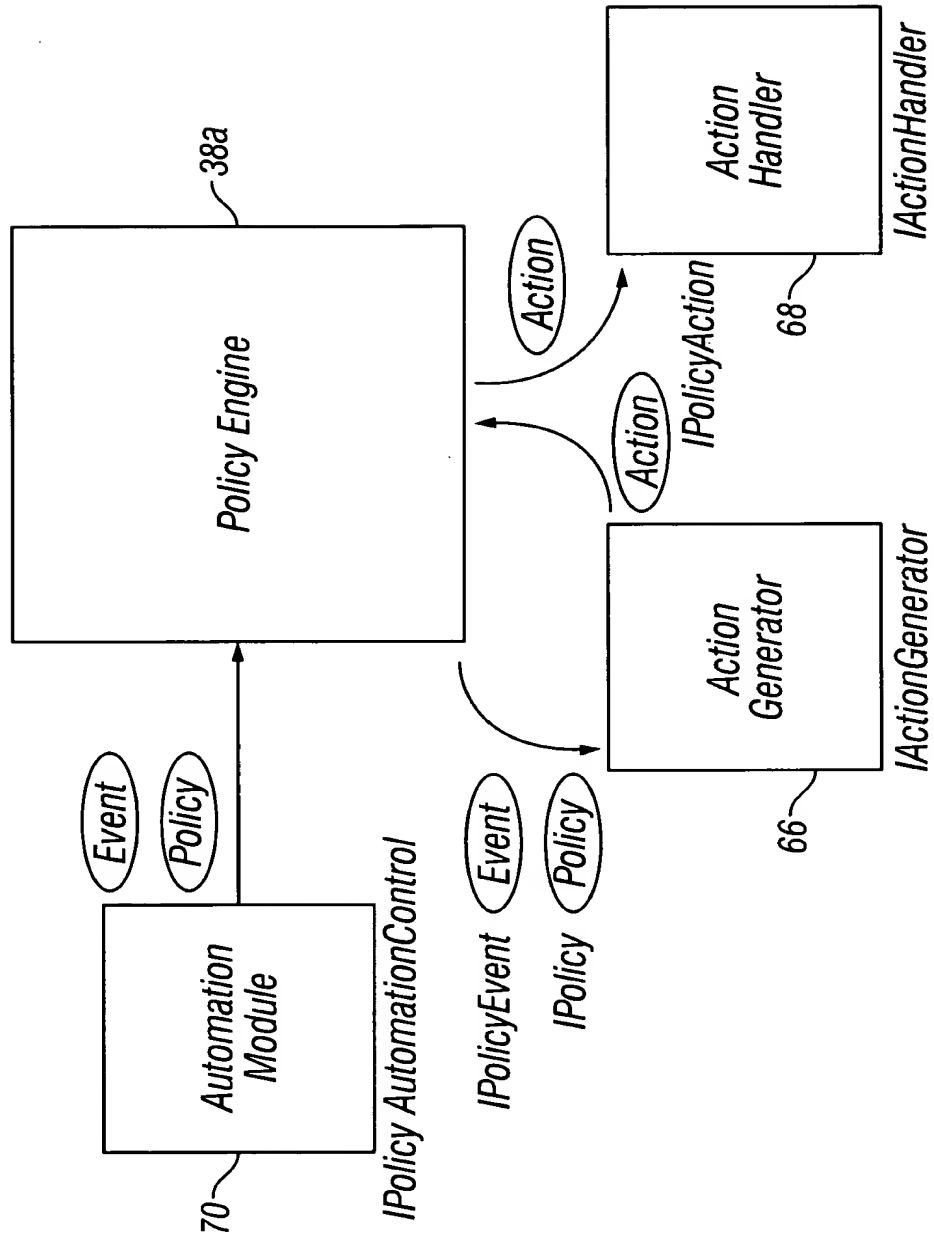


FIG. 7B

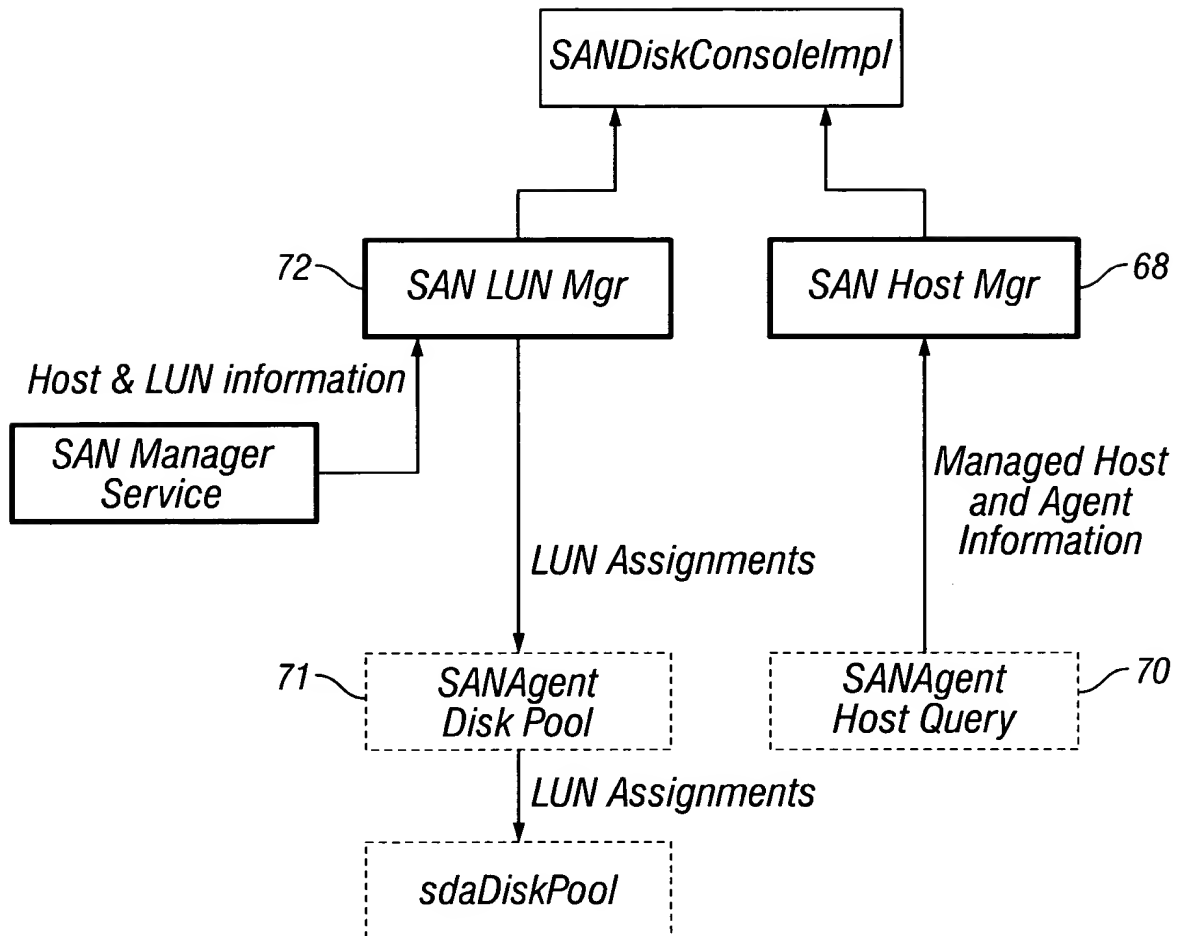


FIG. 8

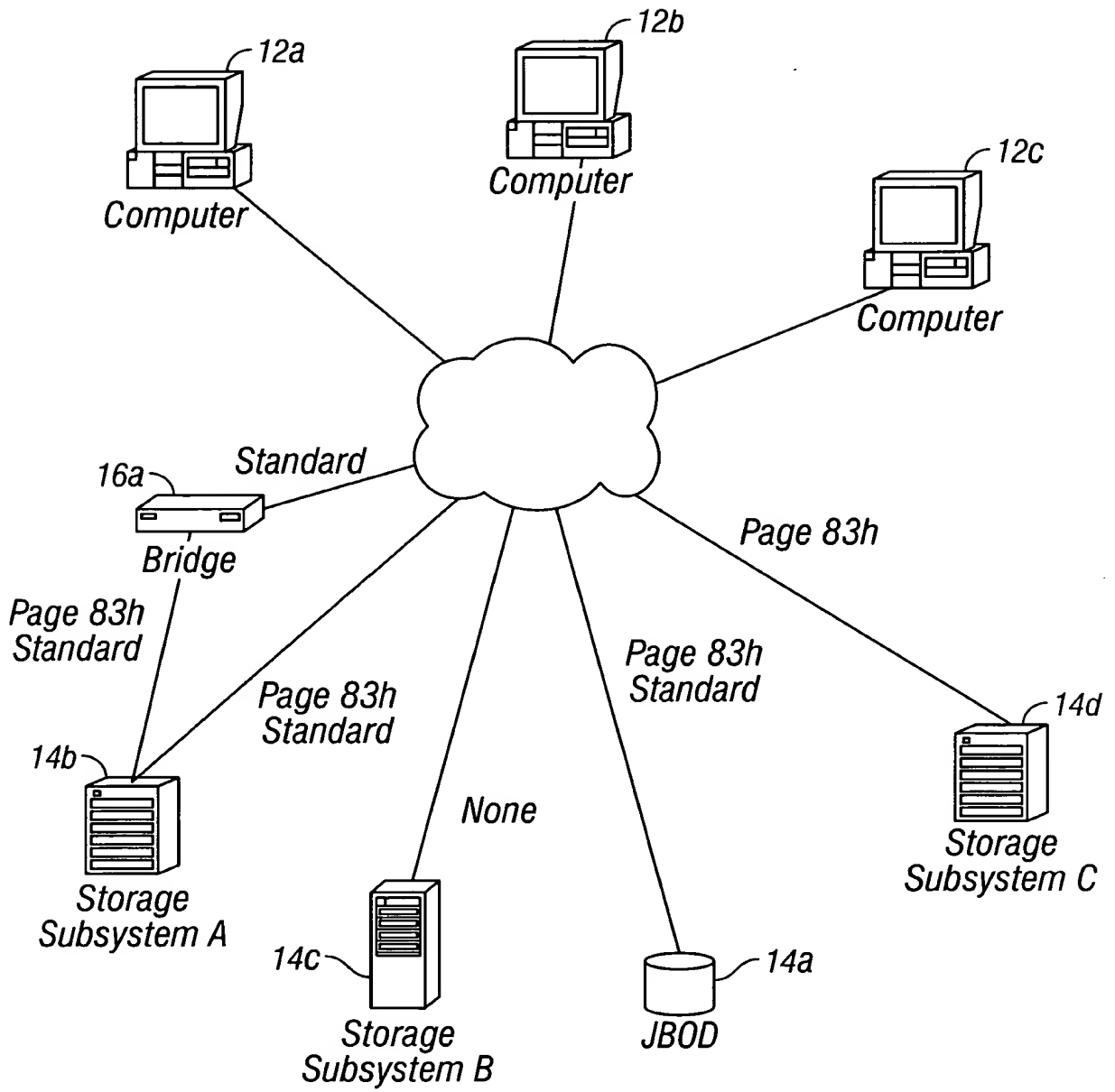


FIG. 9

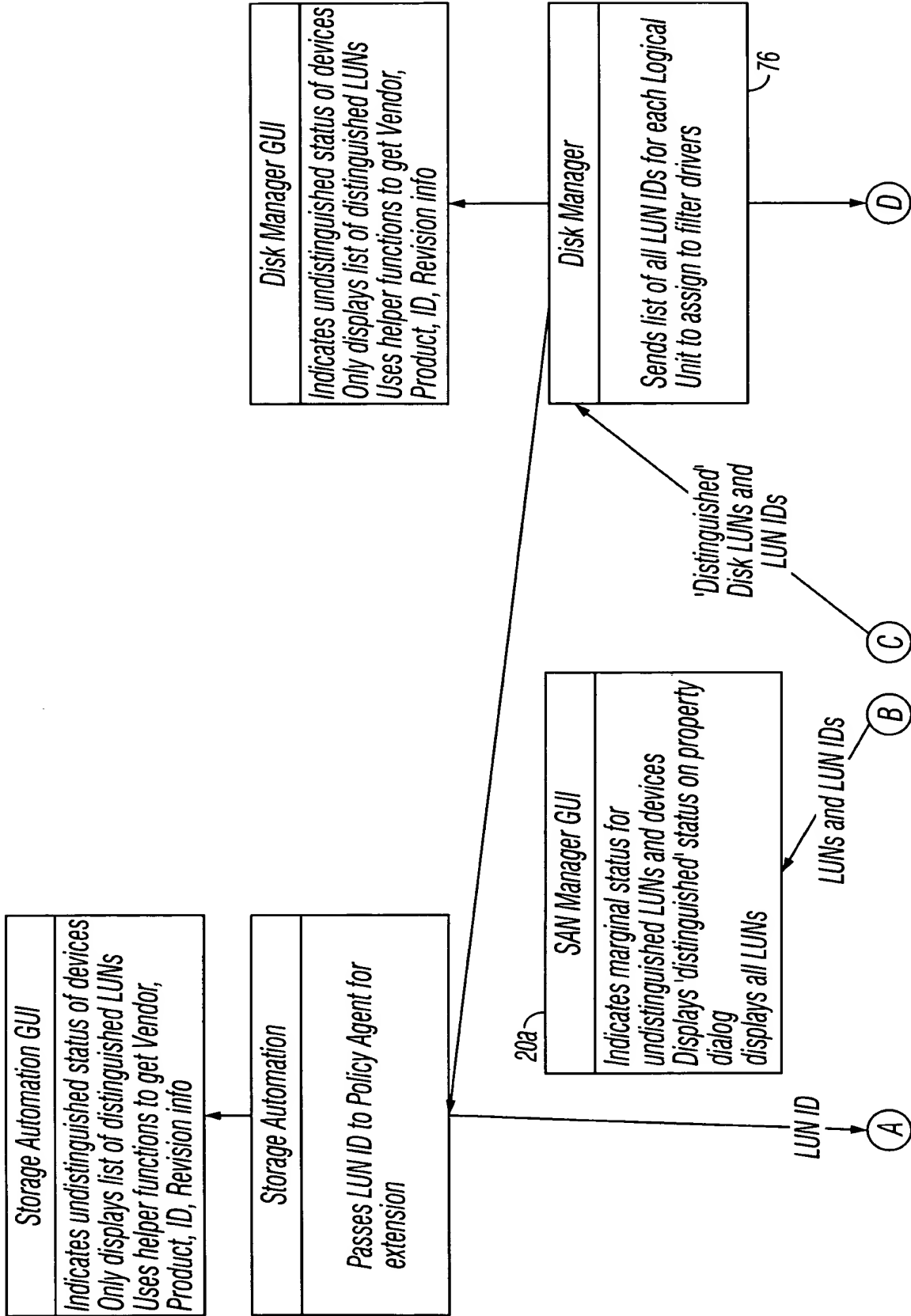


FIG. 10A

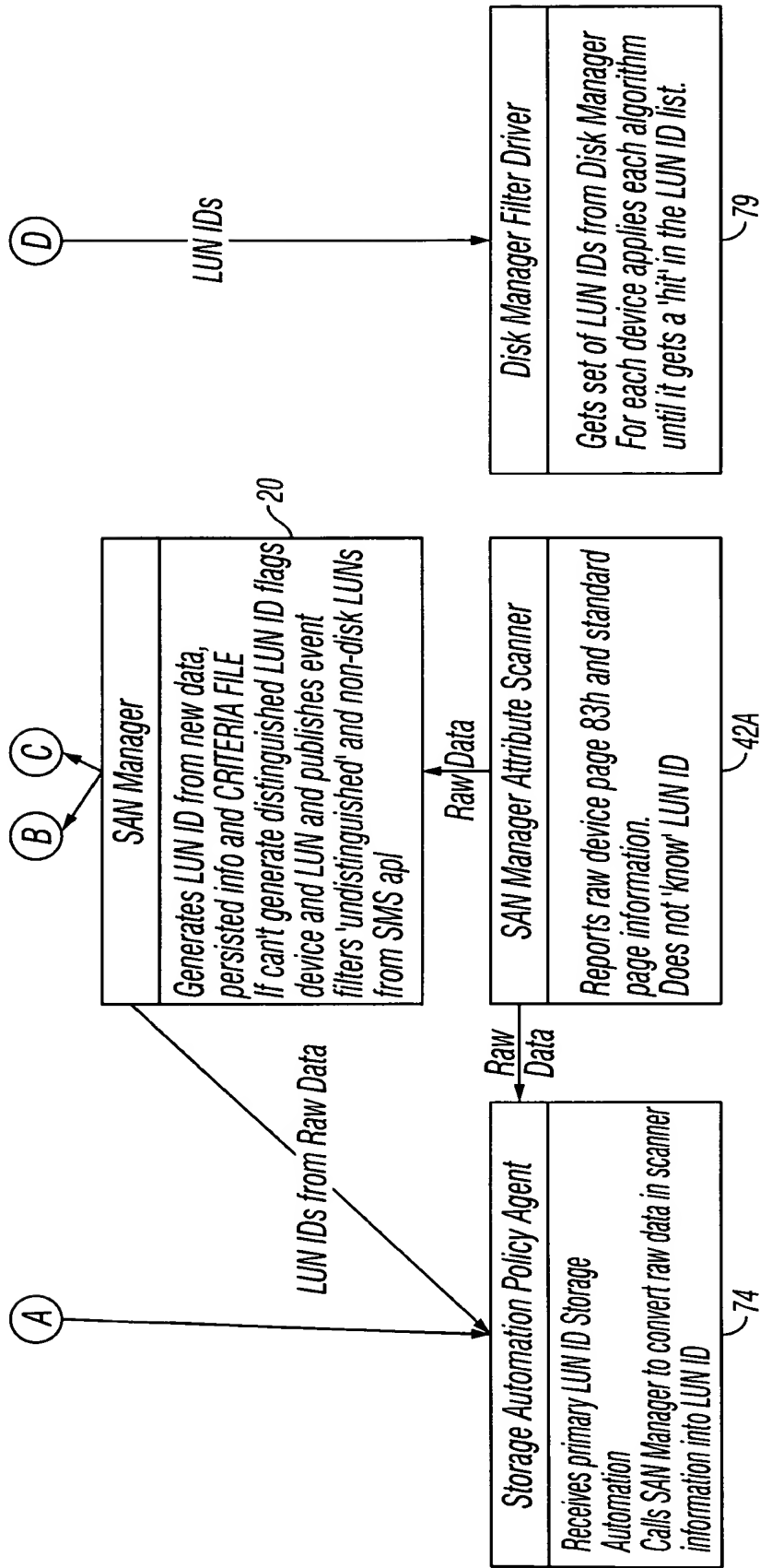


FIG. 10B



FIG. 11

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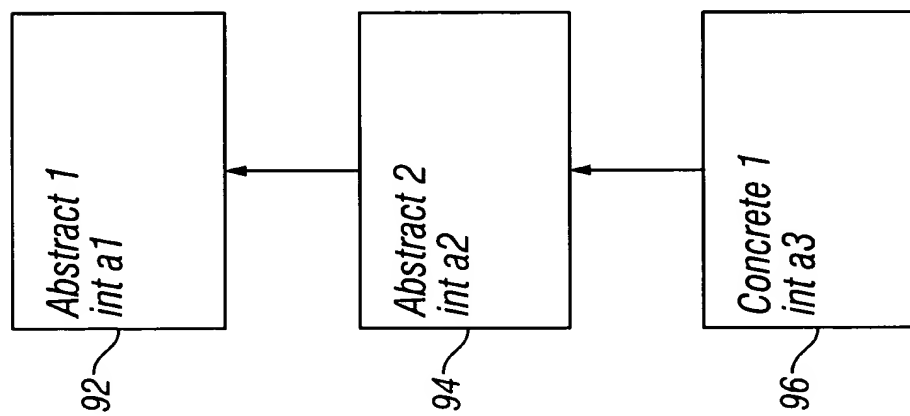


FIG. 12

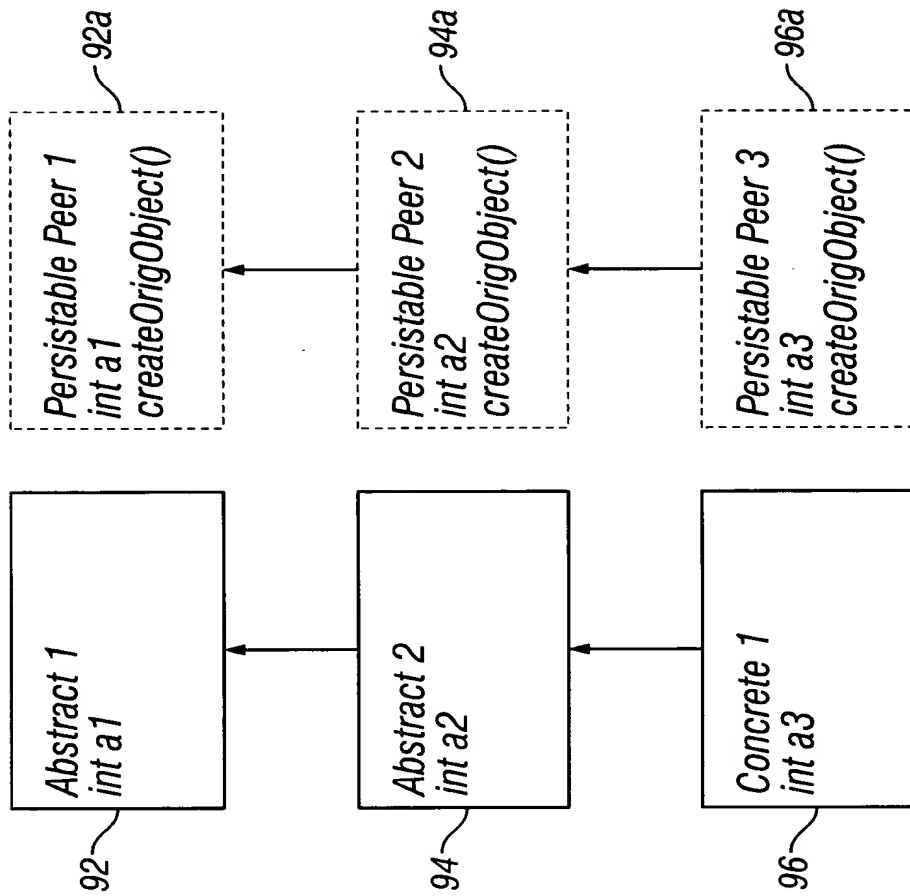


FIG. 13

FIG. 14A

FIG. 14B

FIG. 14C

FIG. 14D

FIG. 14

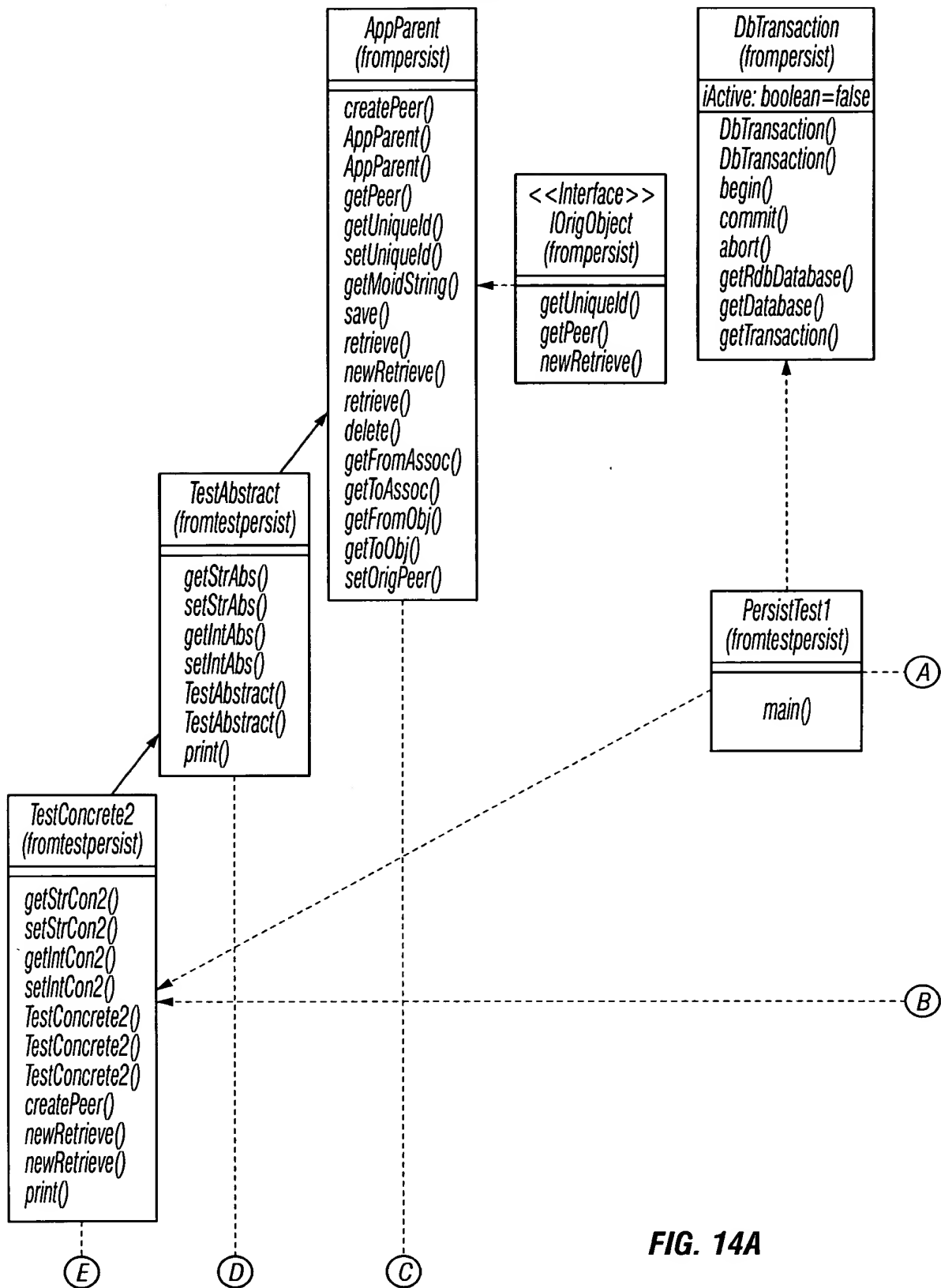


FIG. 14A

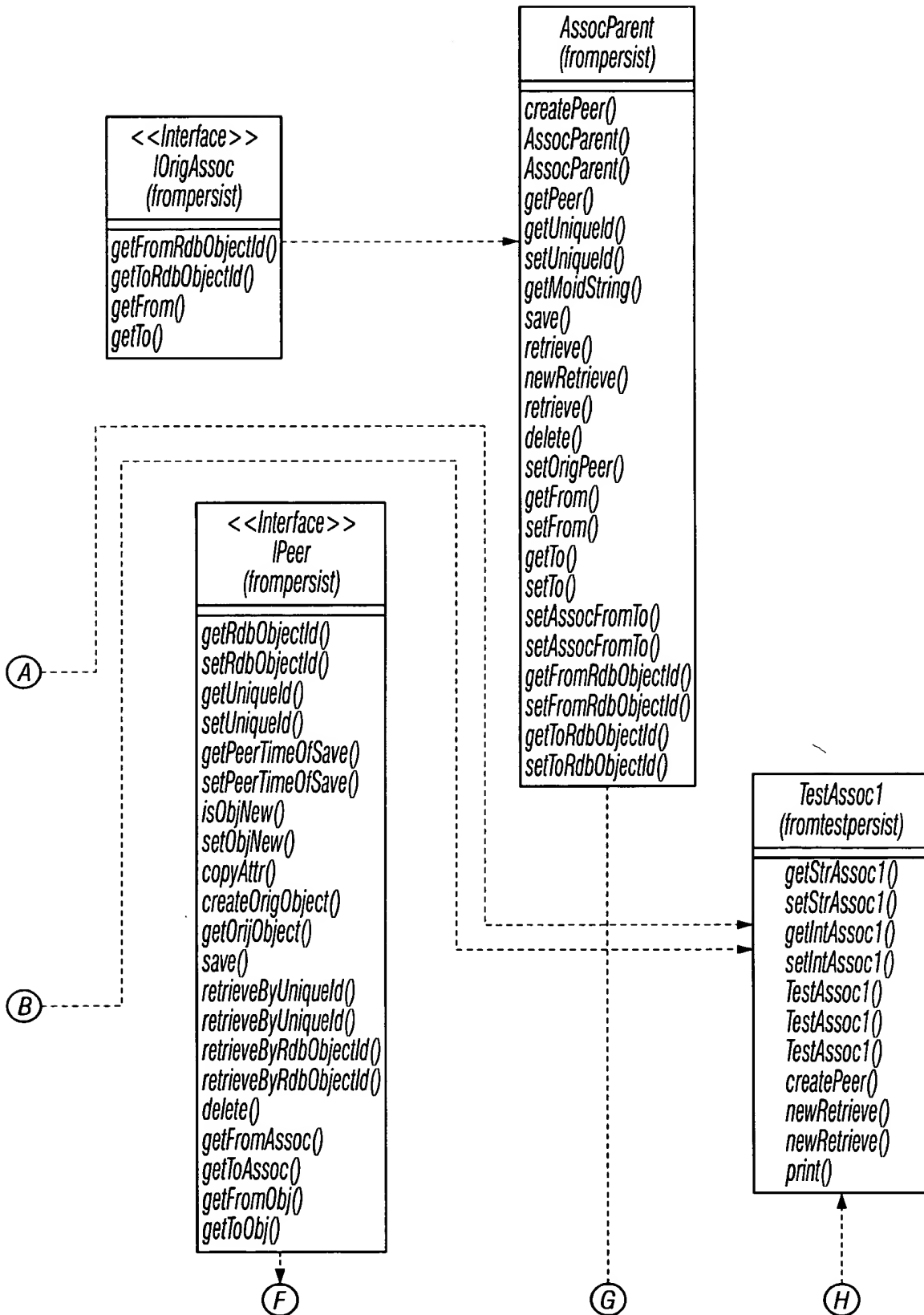


FIG. 14B

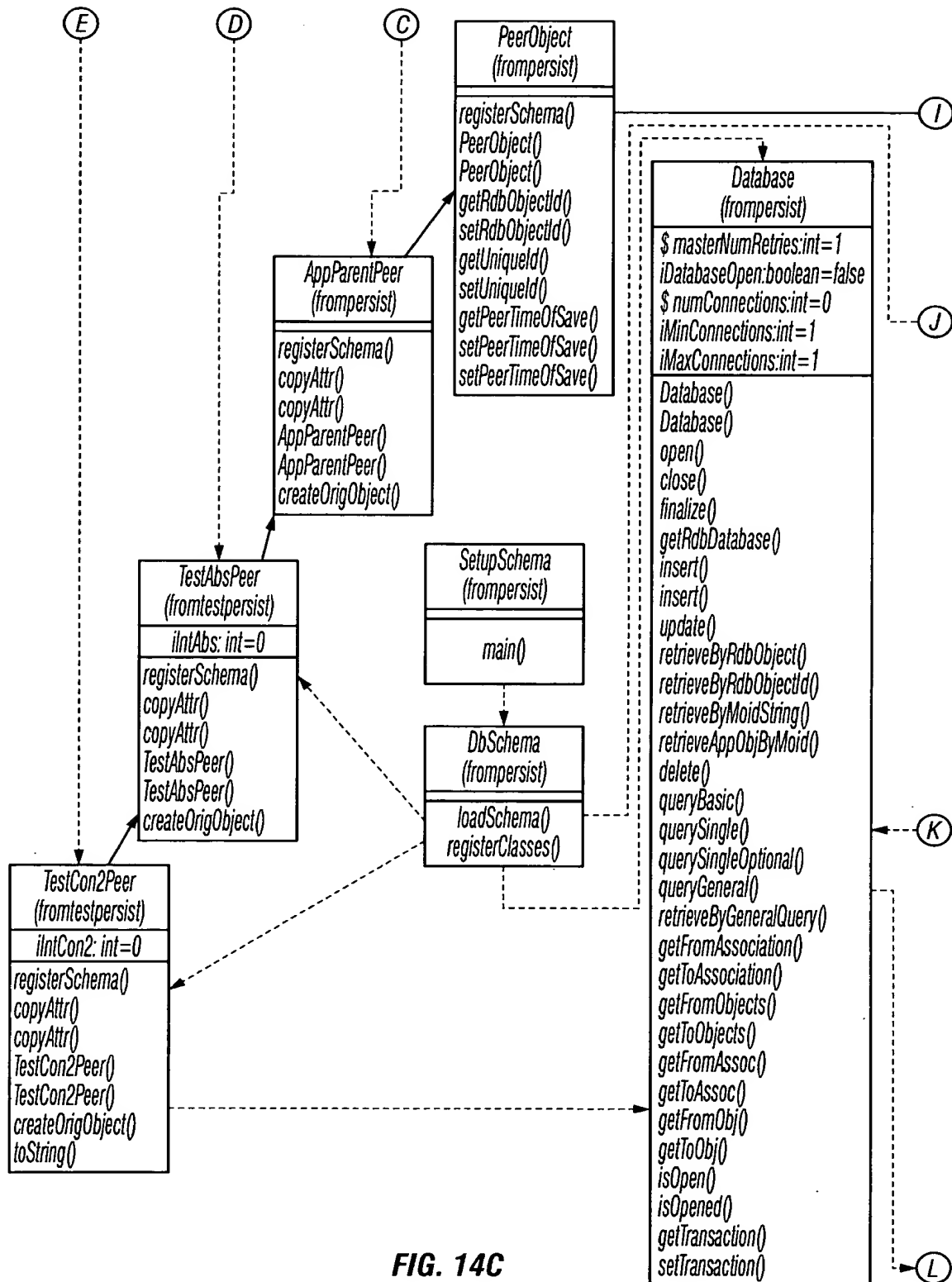
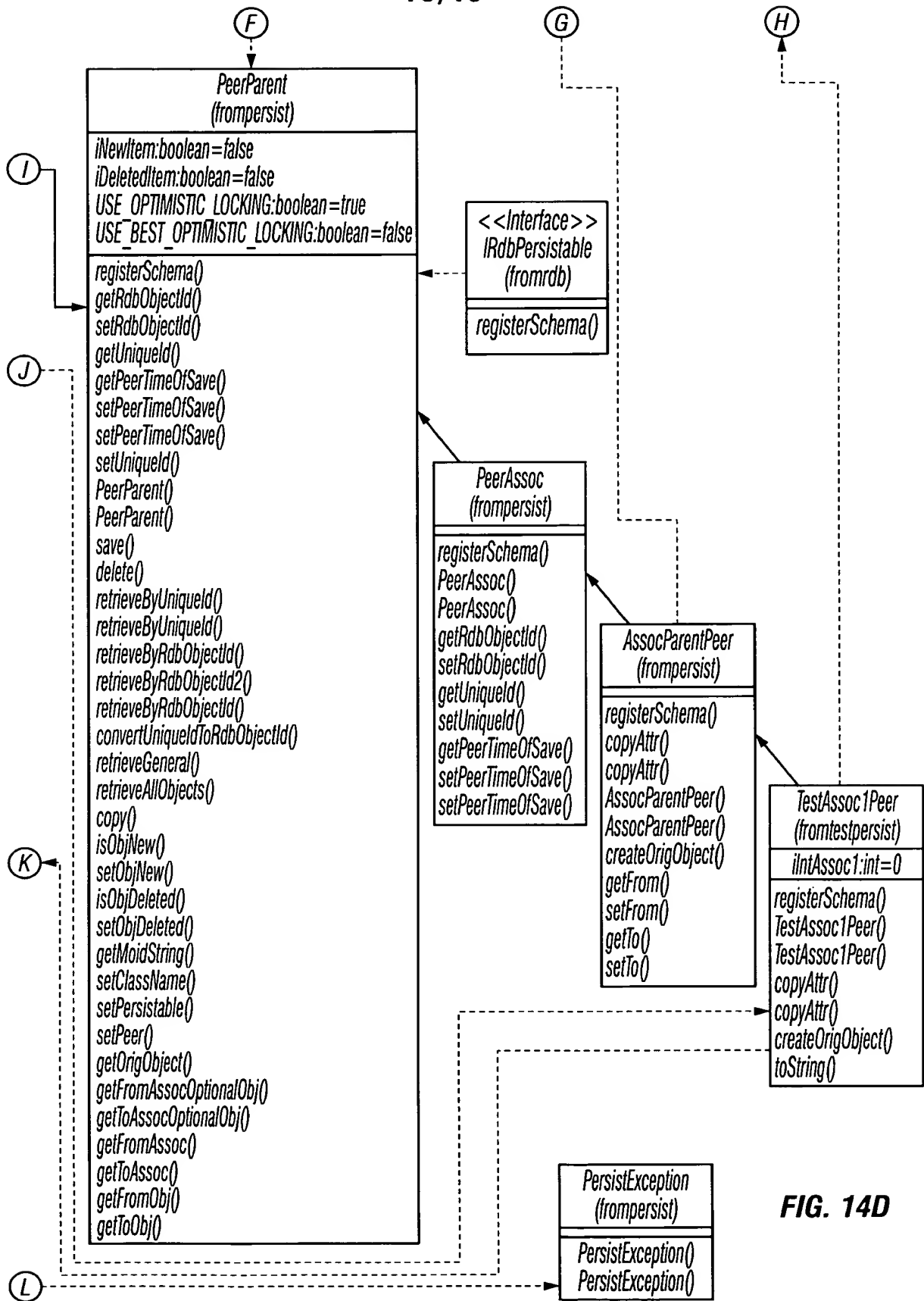
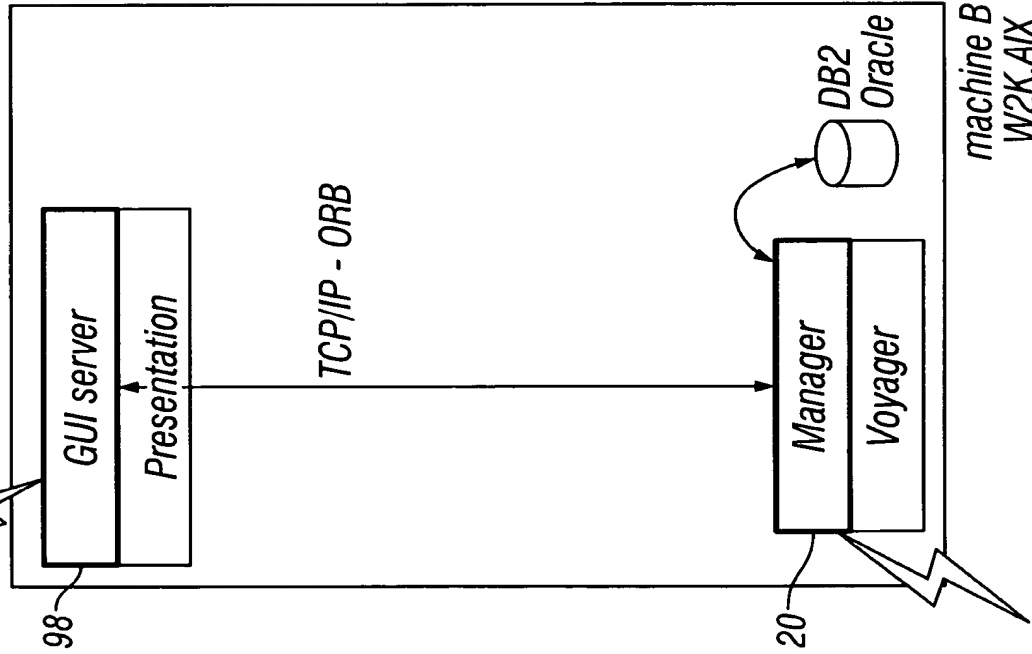


FIG. 14C



GUI (server) & Manager communication



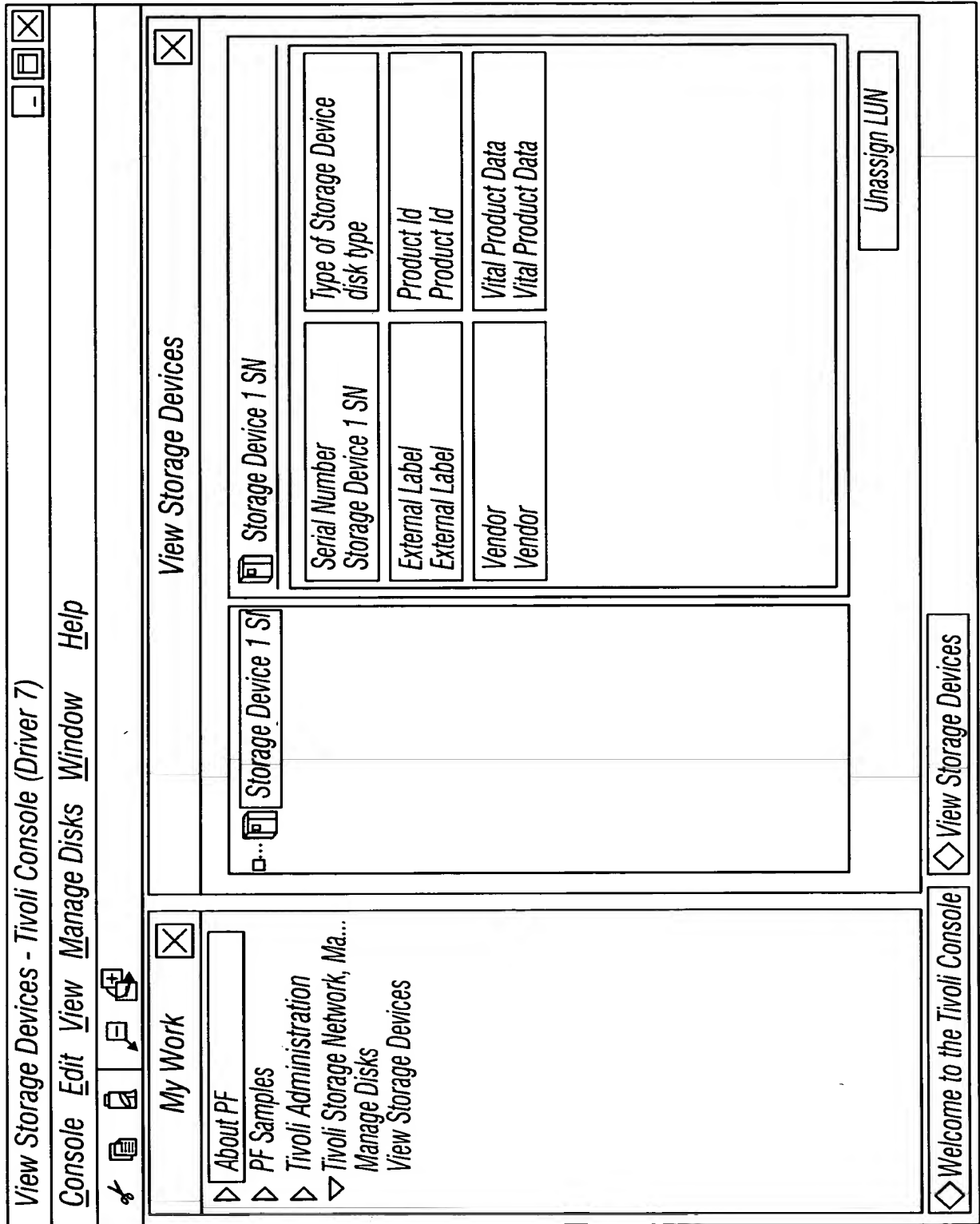
- ▲ Manager creates objects (services) and "bind" them to Voyager directory service
- ▲ GUI "looks up" the object by name in directory service and get the object "proxy"
- ▲ GUI invokes object methods to obtain info or perform operation

Example: Class TDMServer()

```
LUN[] getAccessibleLunsByHost(HostaHost)
LUN[] getAccessibleLunsByHost(java.lang.String ip)
LUN[] getAllAccessibleLuns()
LUN[] getAssignedLunsByHost(HostaHost)
LUN[] getAssignedLunsByHost(java.lang.String ip)
```

```
//Look up the ITdm Server proxy object from the directory service
ITdmServeraTdm=(ITdm Server) Namespace.lookup(
"/localhost:9000/sandir/ITdmServer");
//Get a list of all LUN objects in the region.
Lun[] temp1=aTdm.getAllAccessibleLuns();
```

FIG. 15



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FIG. 16

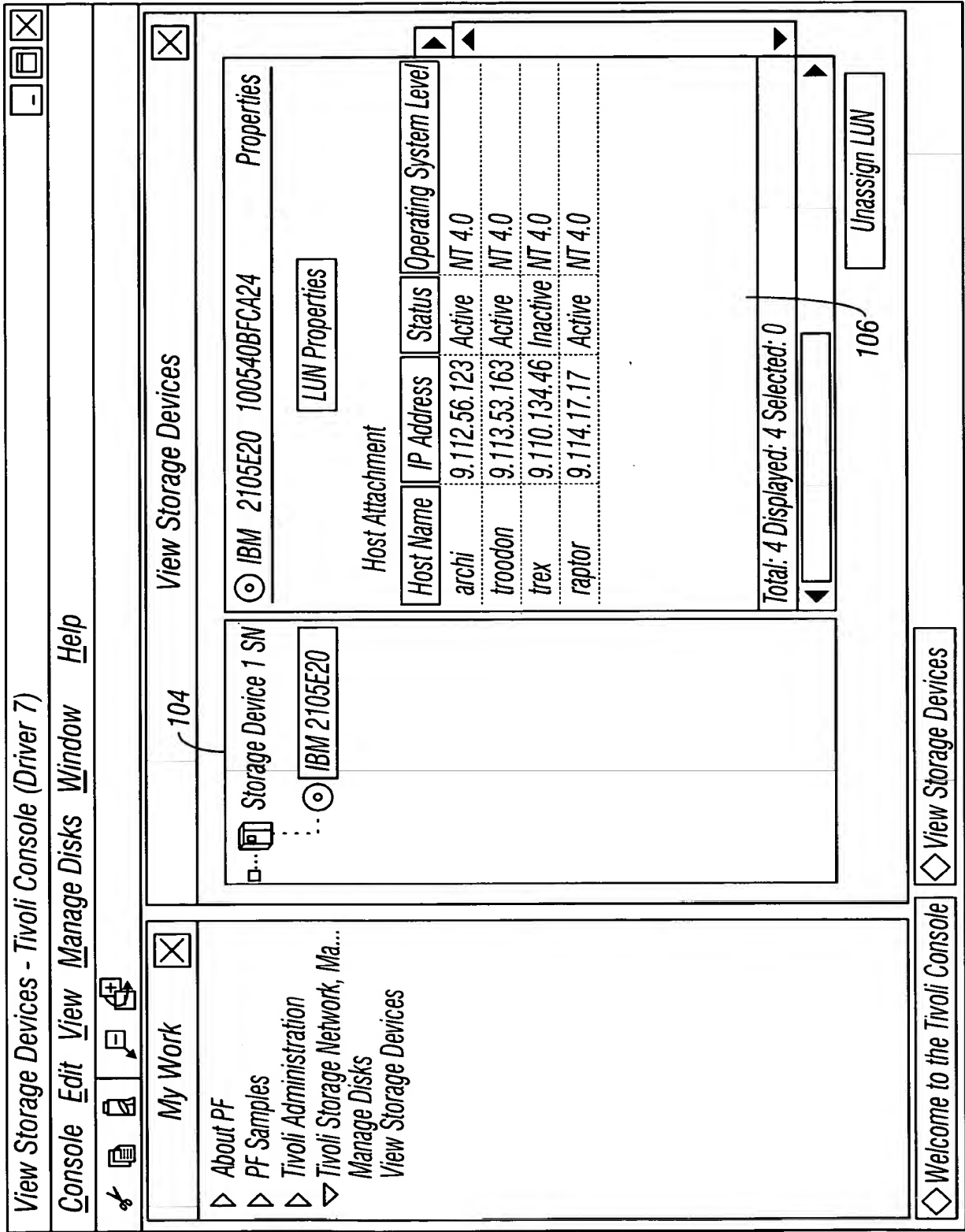


FIG. 17

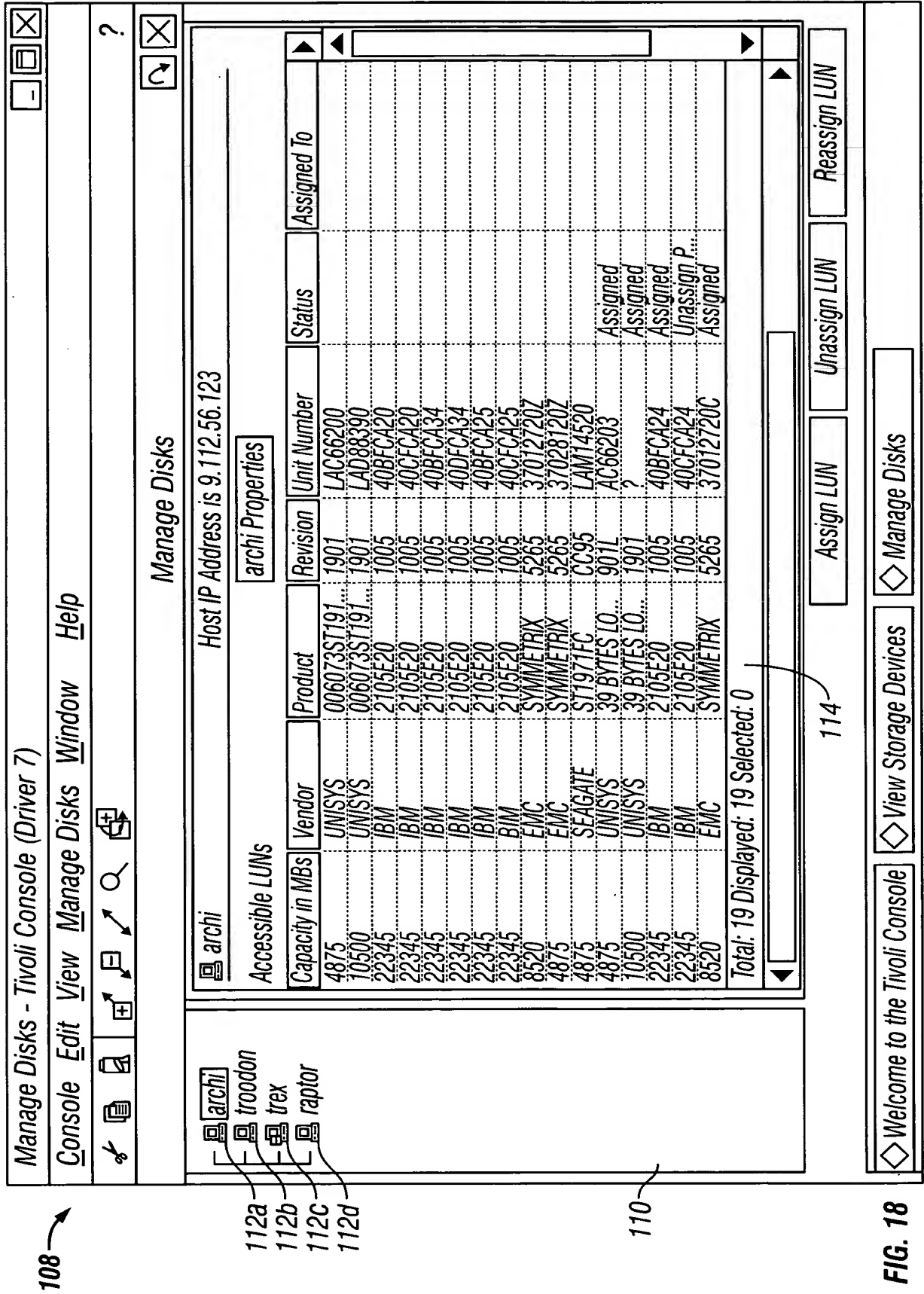


FIG. 19

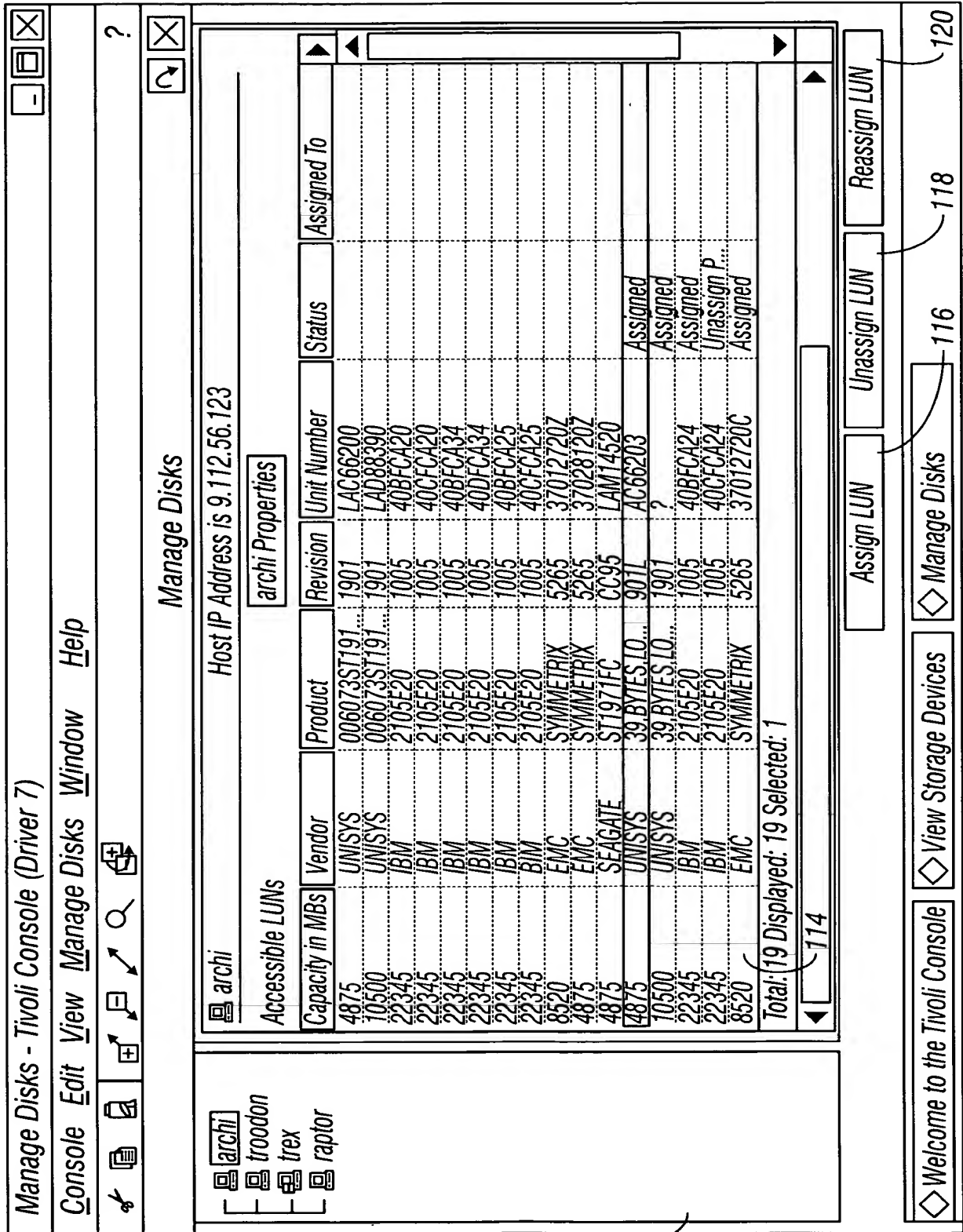


FIG. 20

FIG. 21

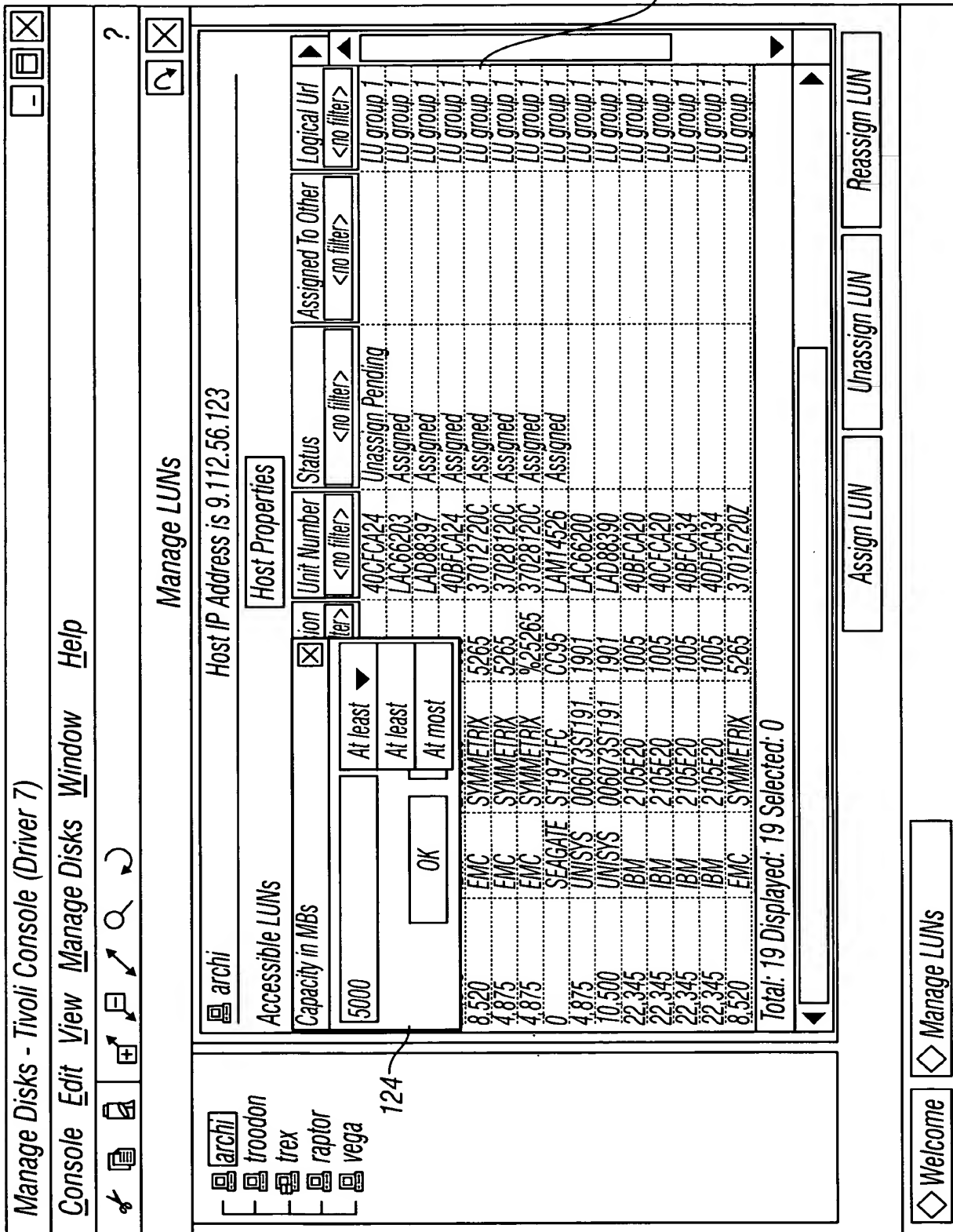


FIG. 22

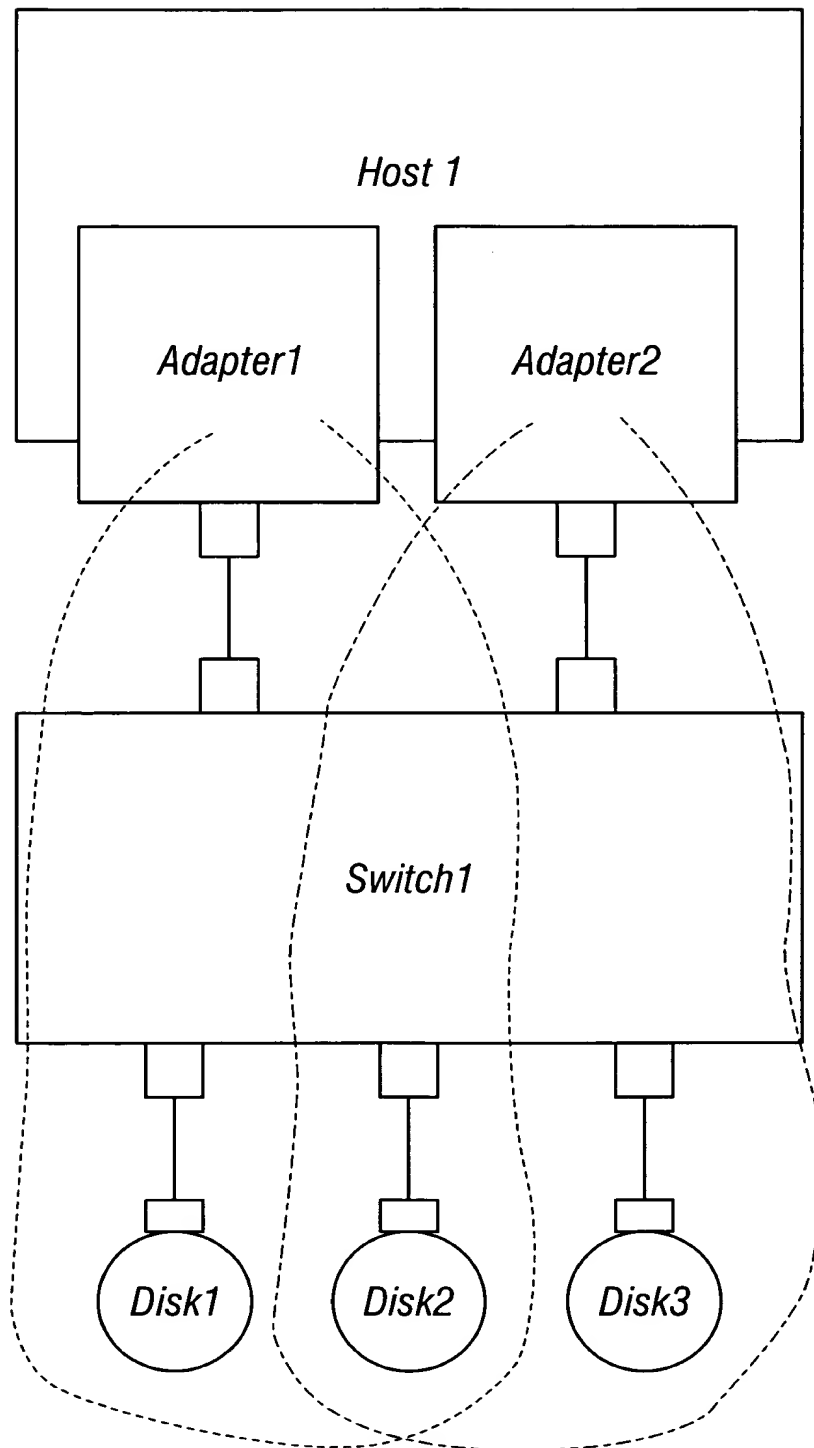


FIG. 23

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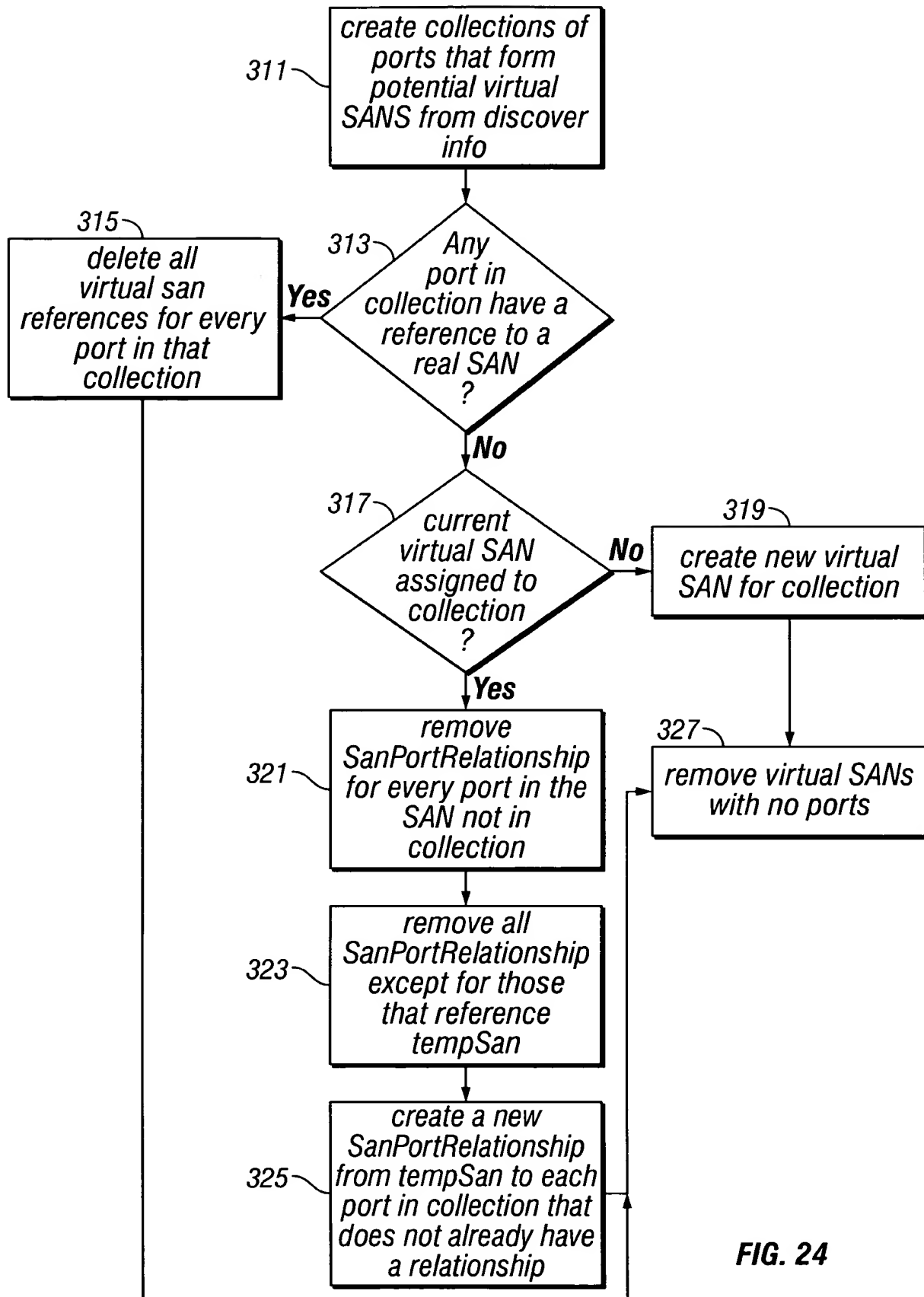


FIG. 24

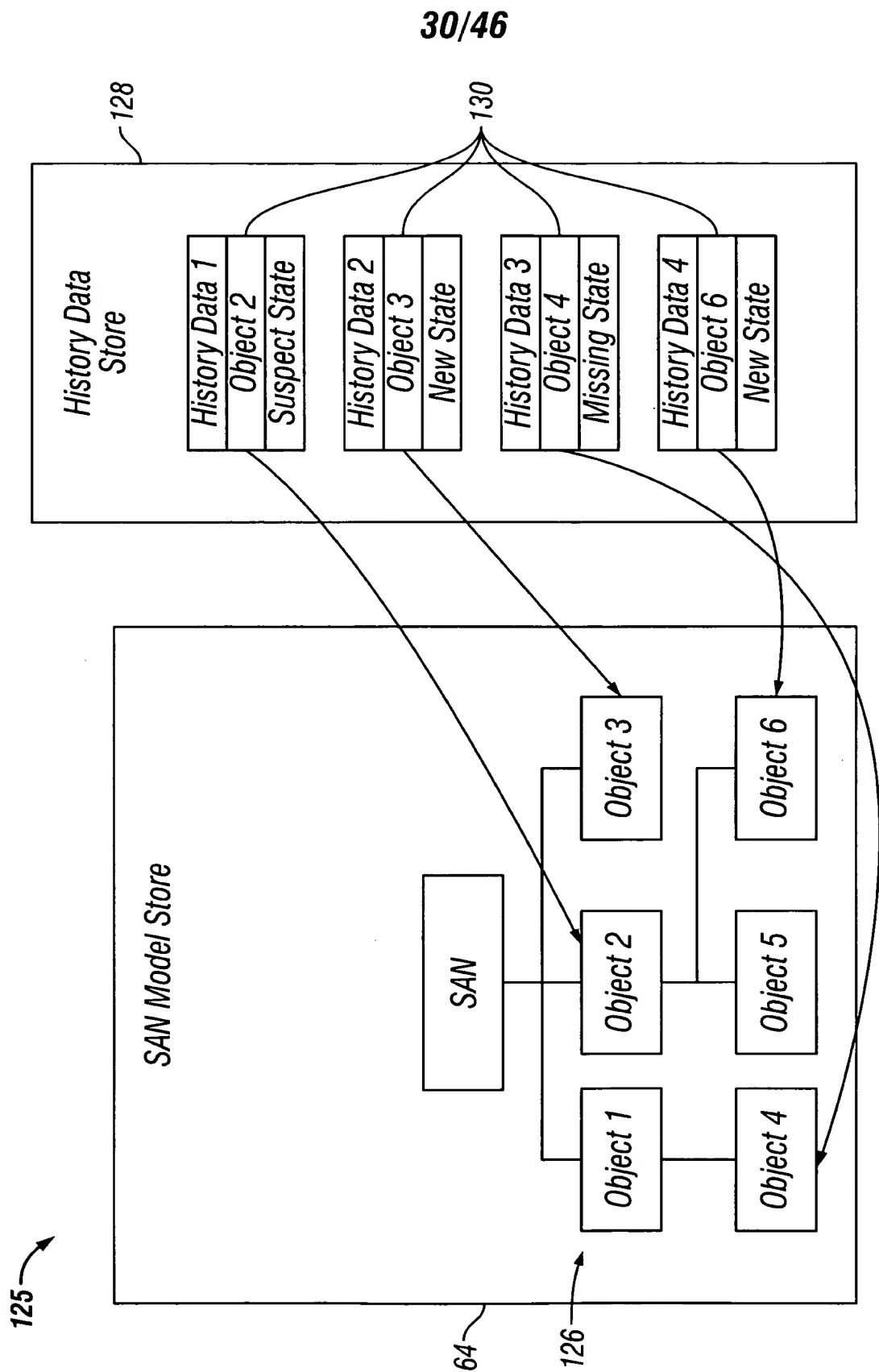


FIG. 25

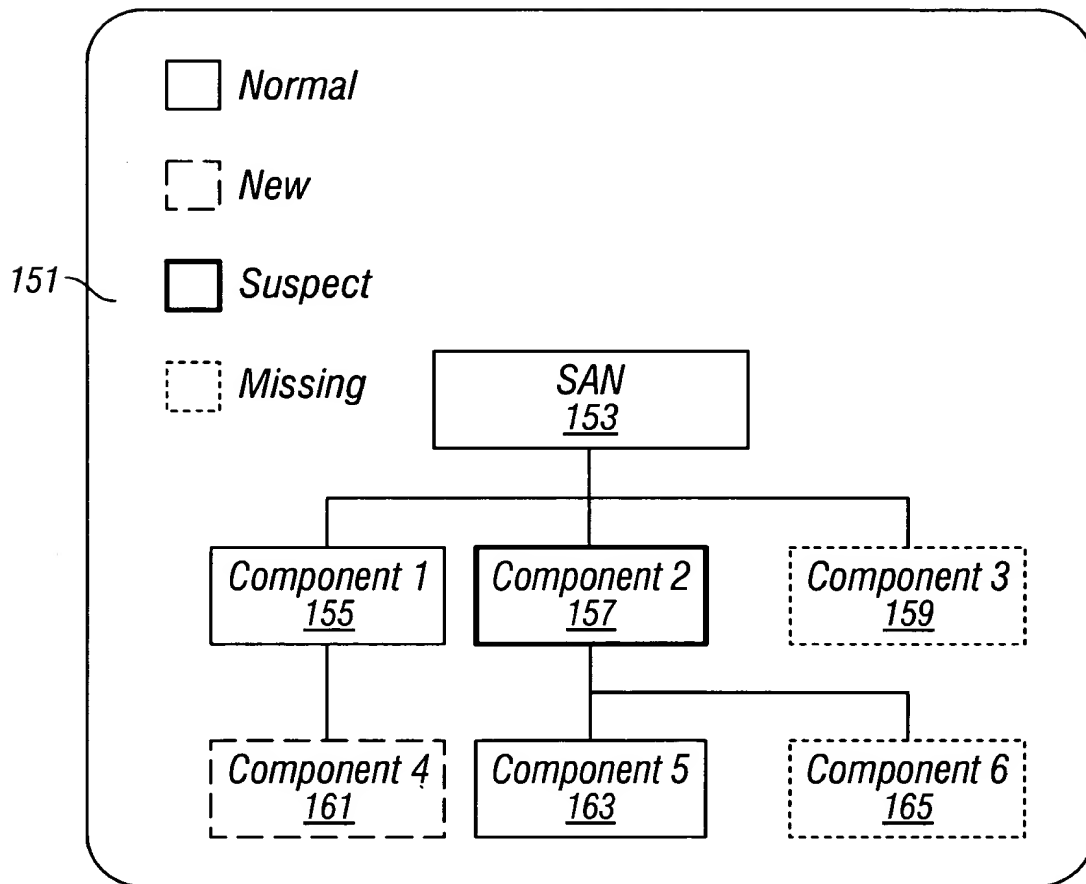


FIG. 26

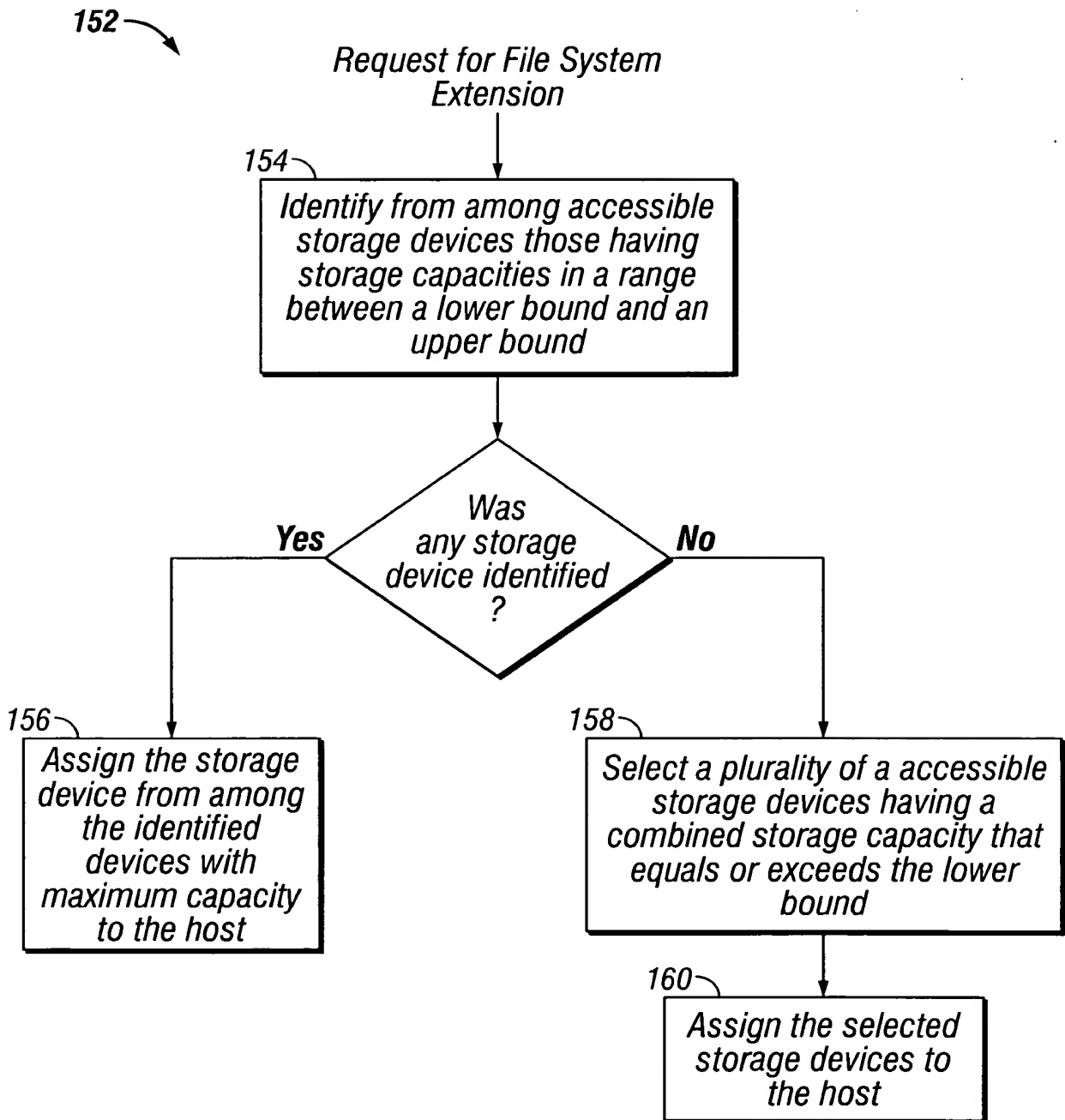
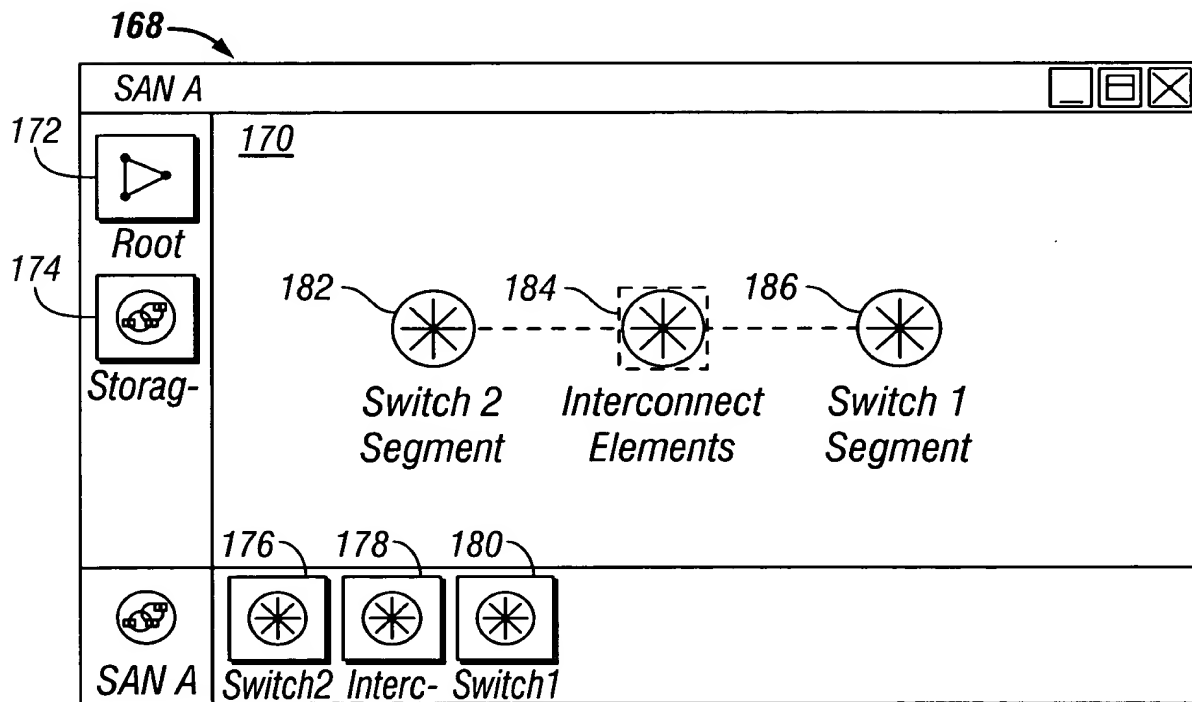
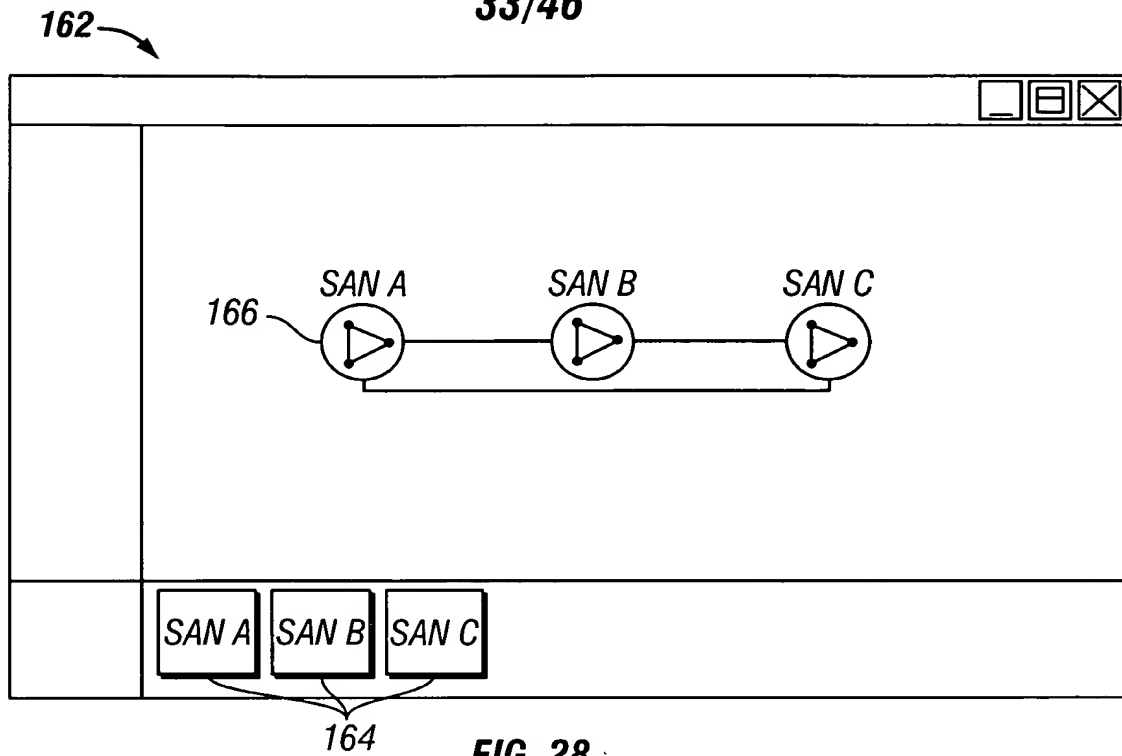


FIG. 27



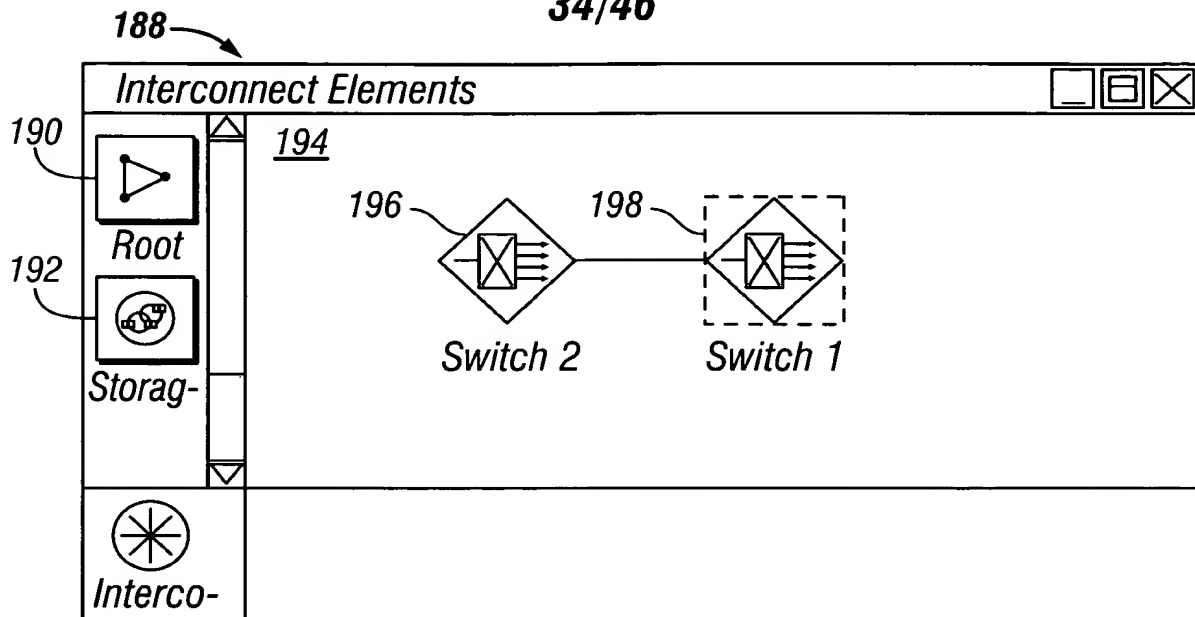


FIG. 30

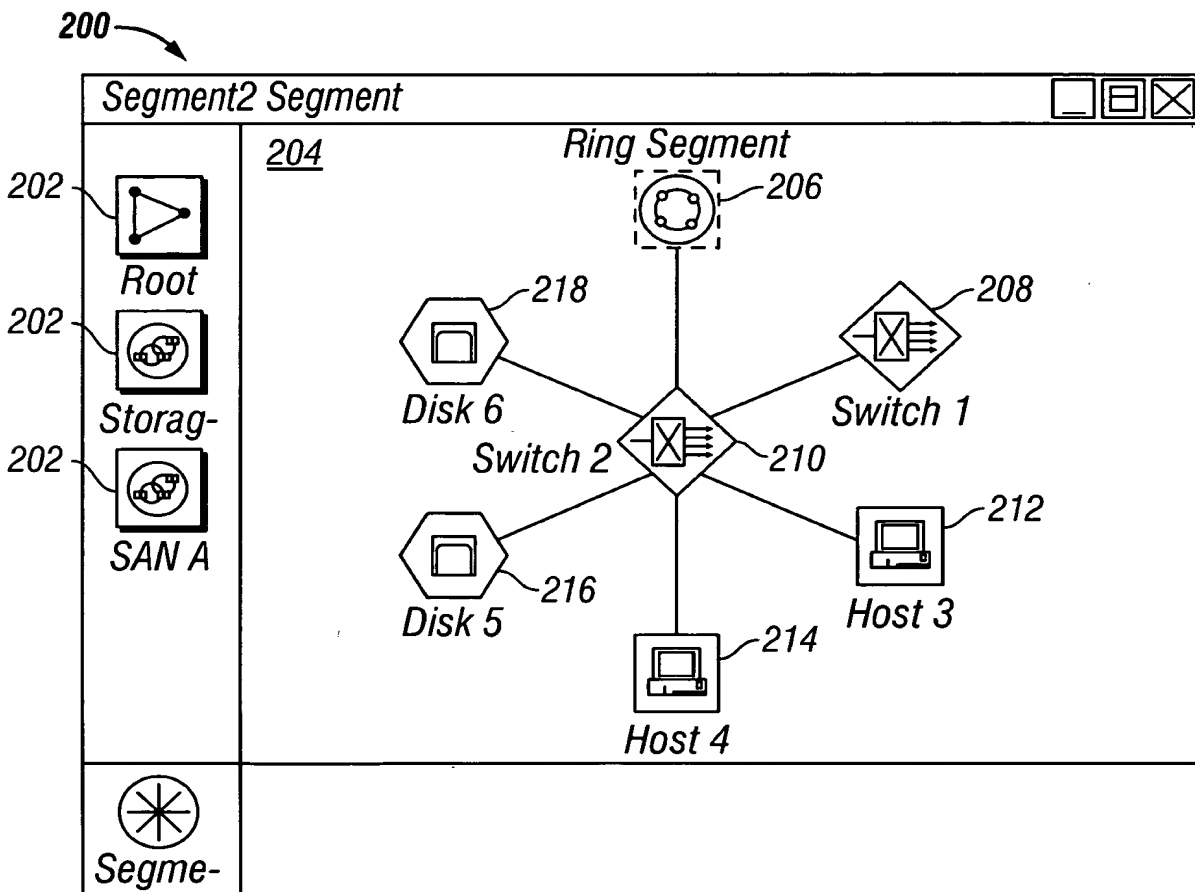


FIG. 31

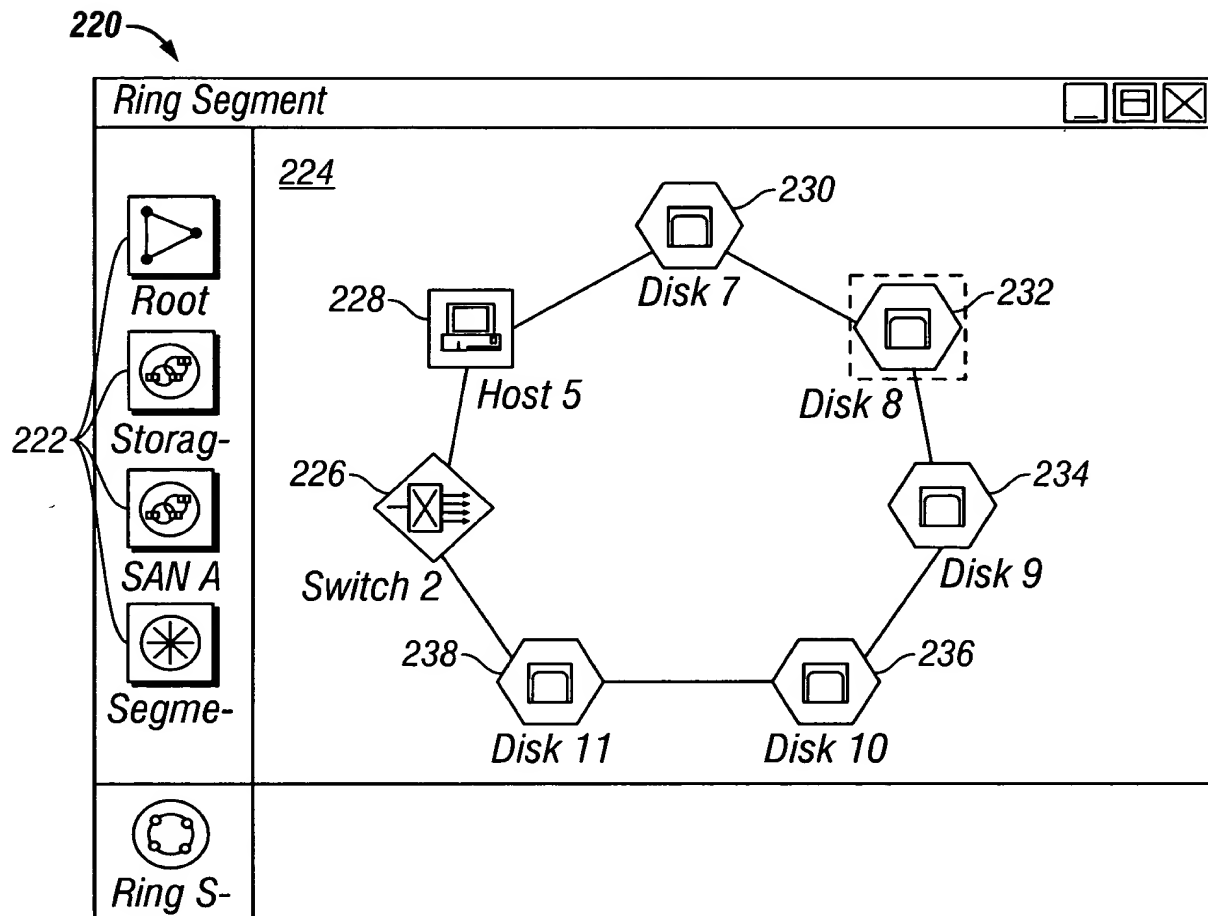


FIG. 32

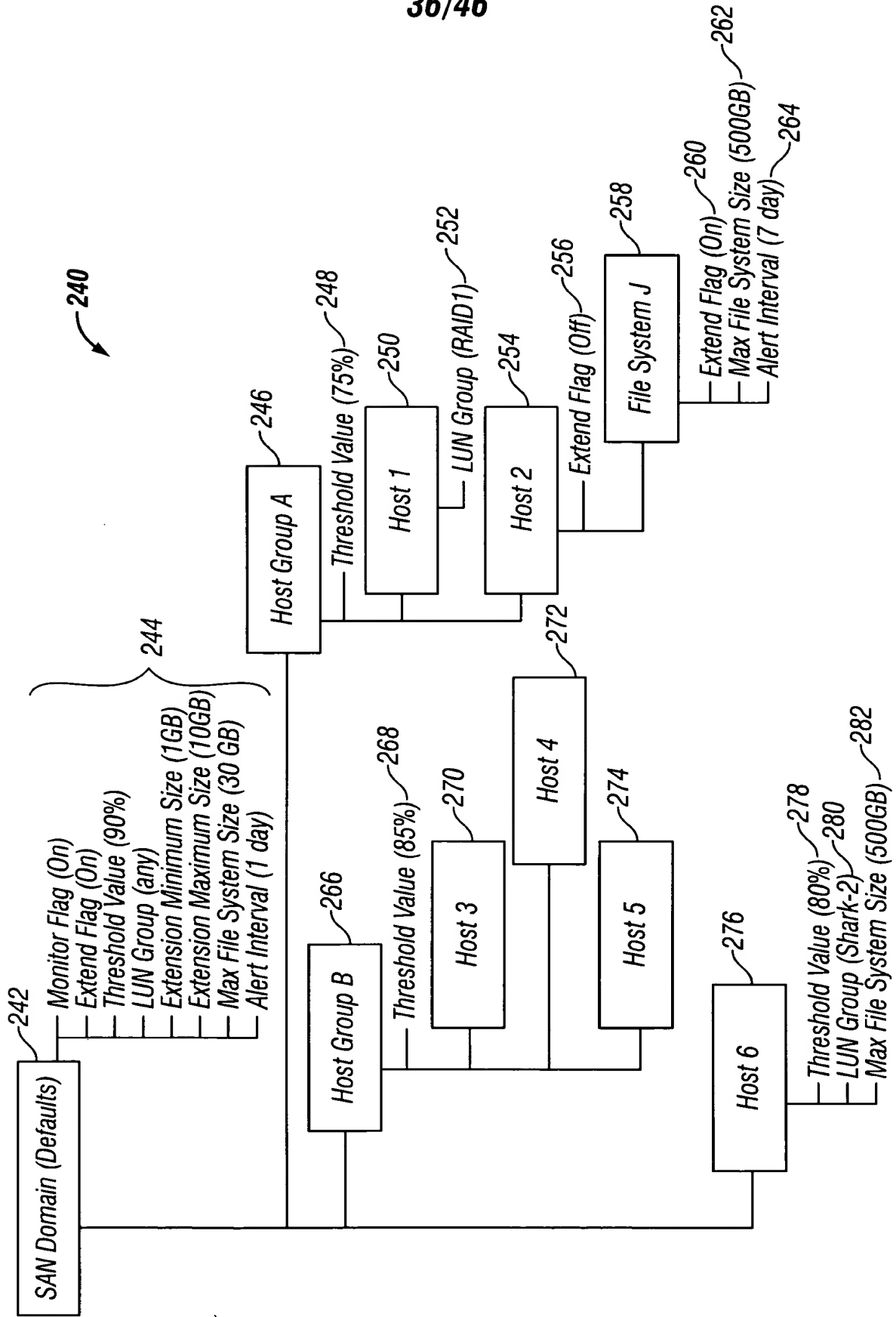


FIG. 33

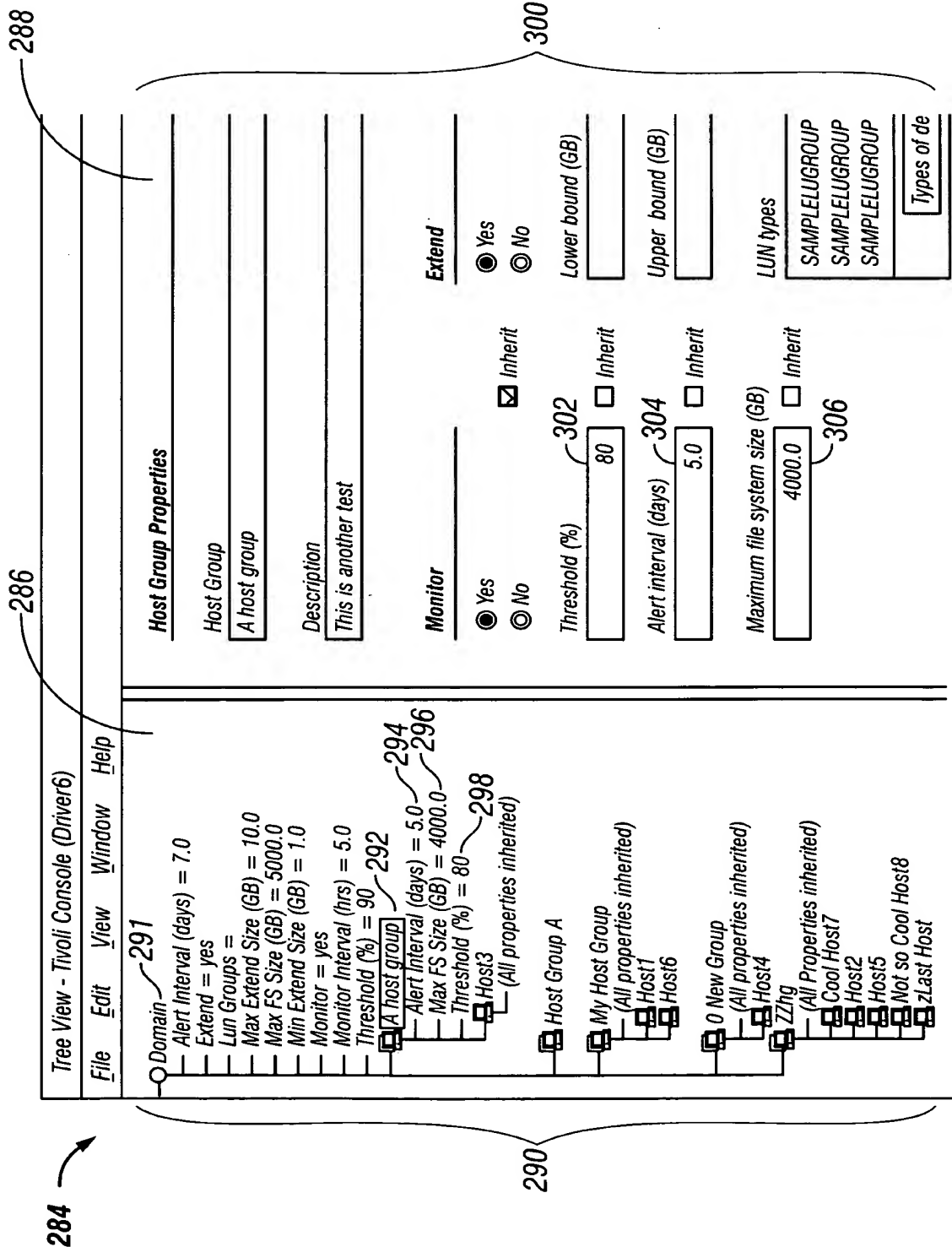


FIG. 34

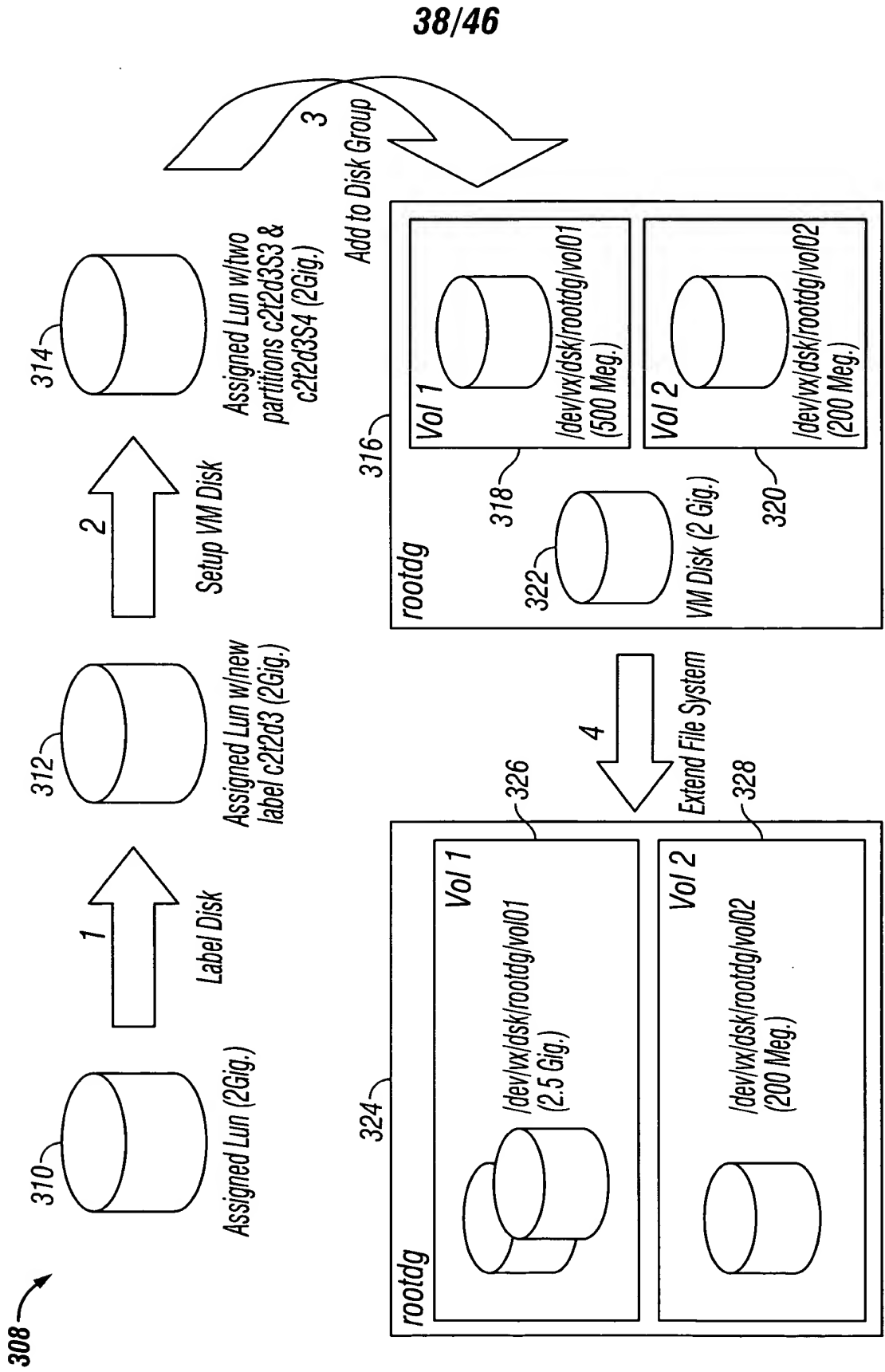


FIG. 35

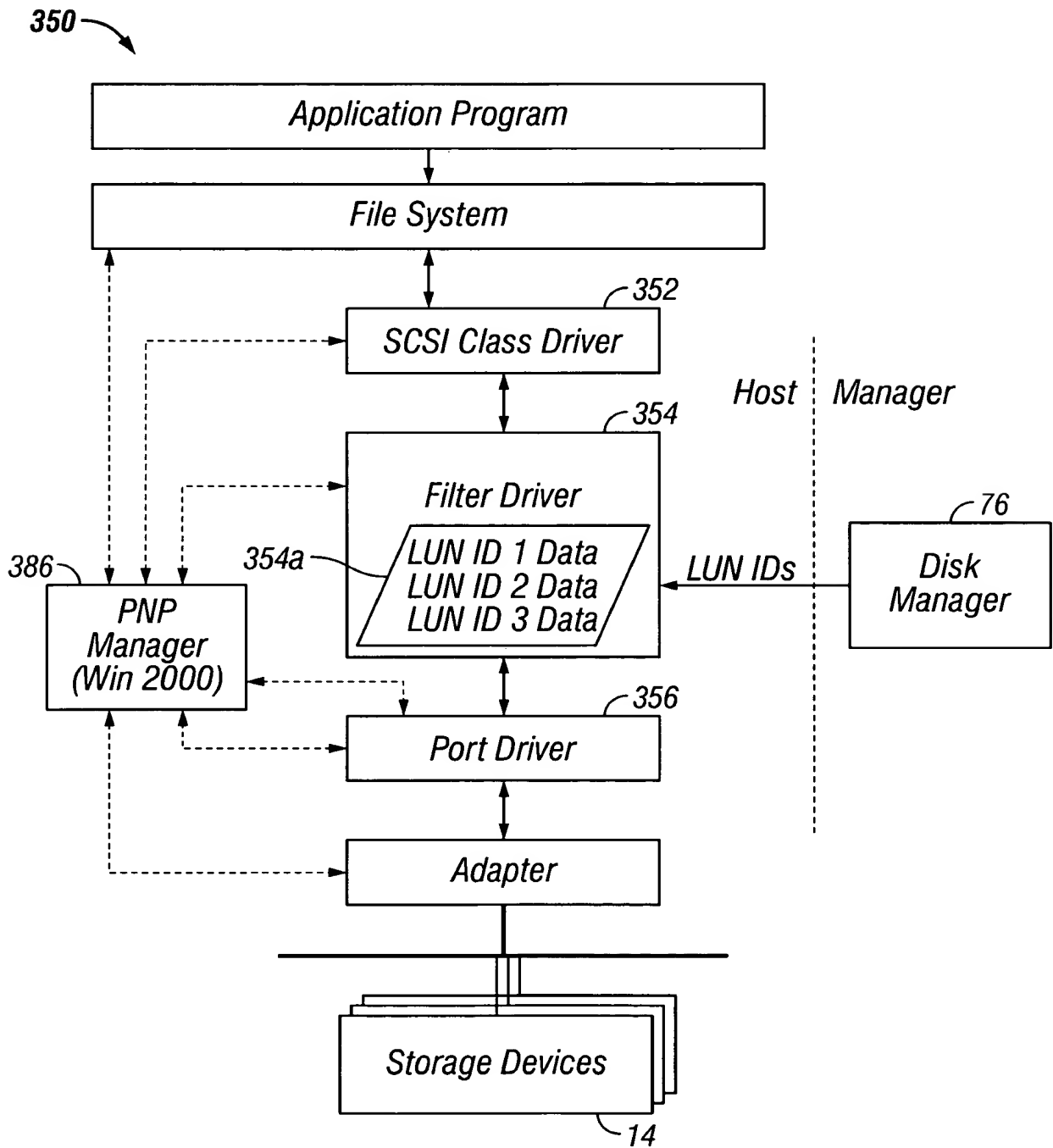


FIG. 36

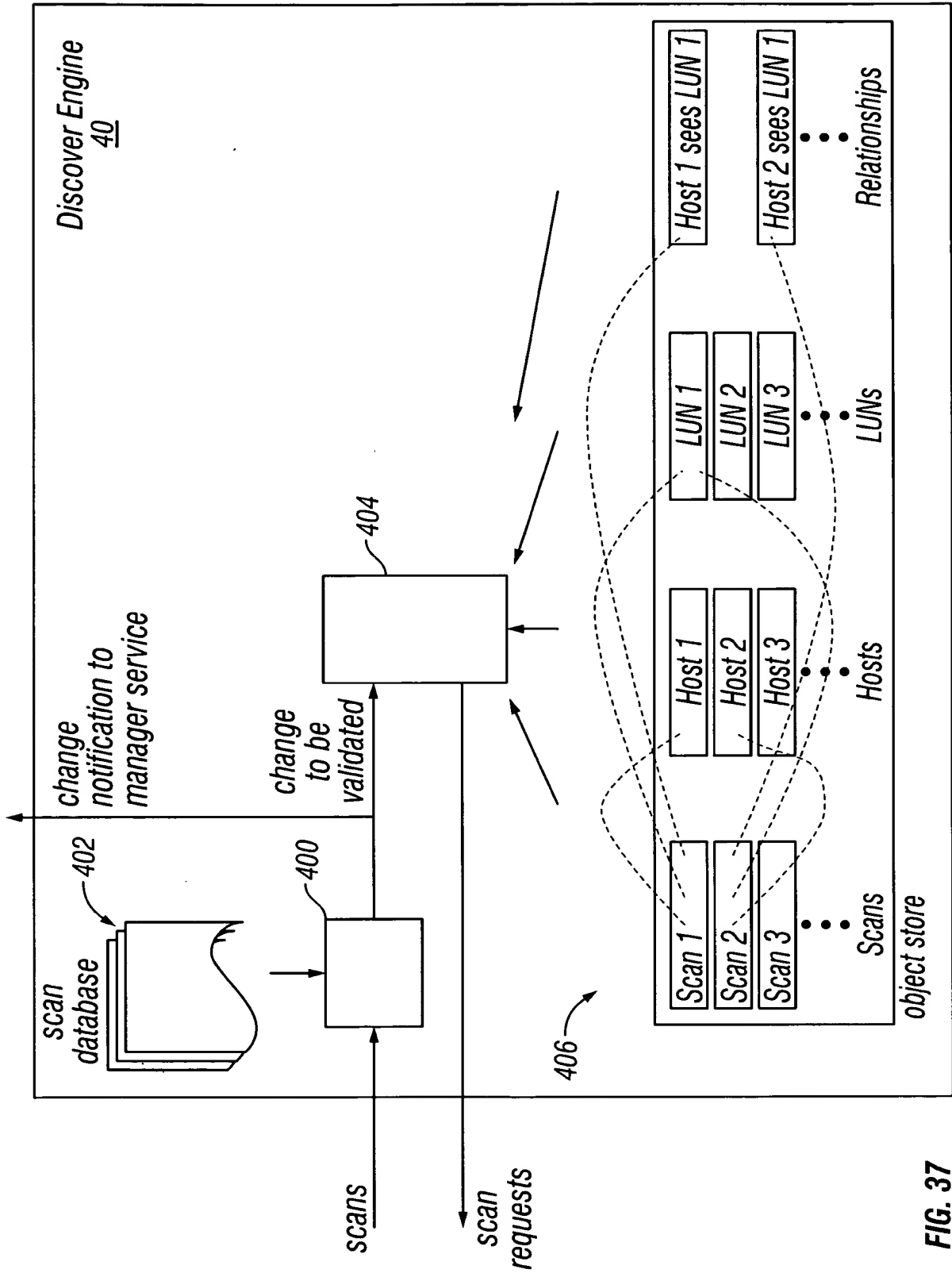


FIG. 37

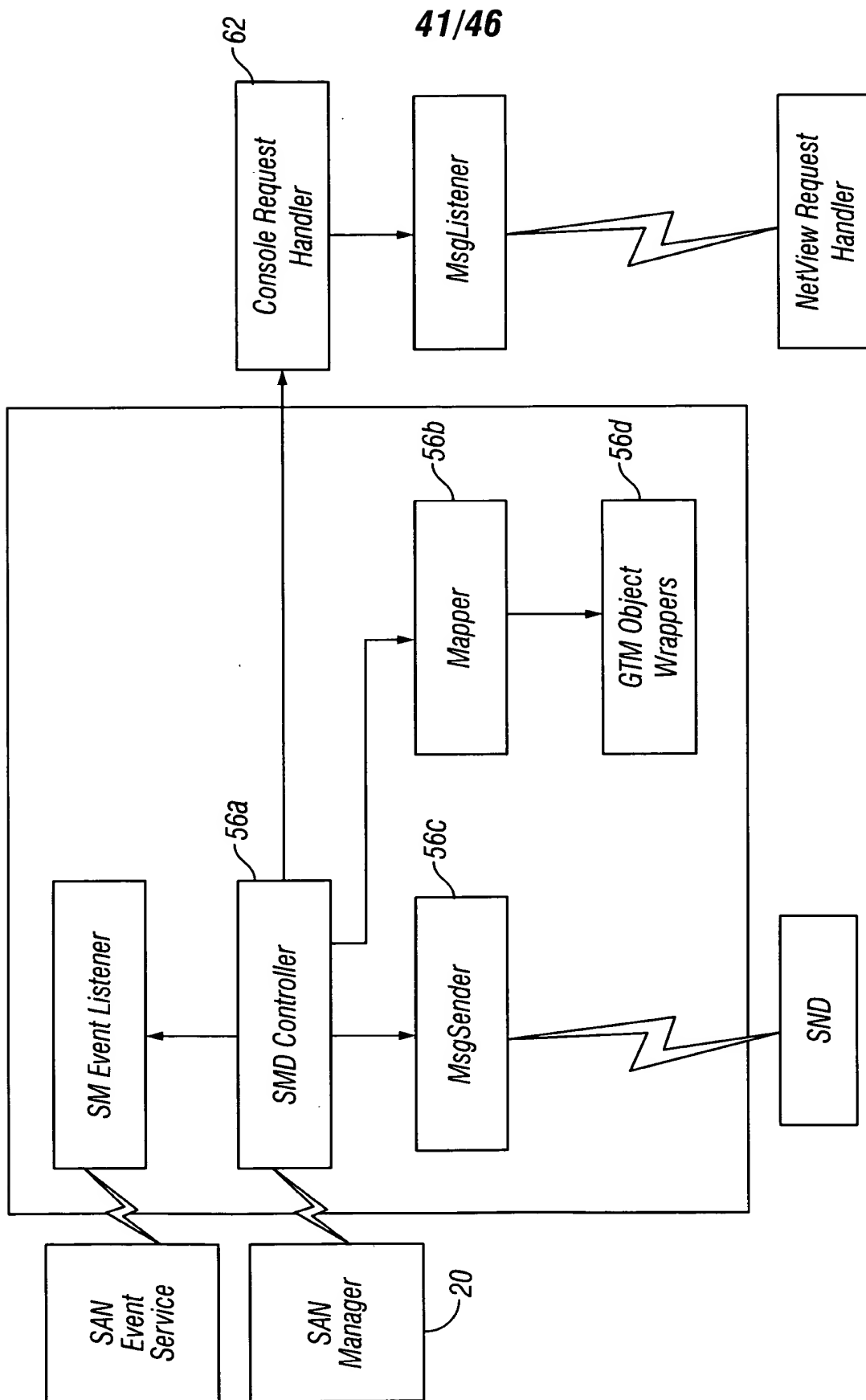


FIG. 38

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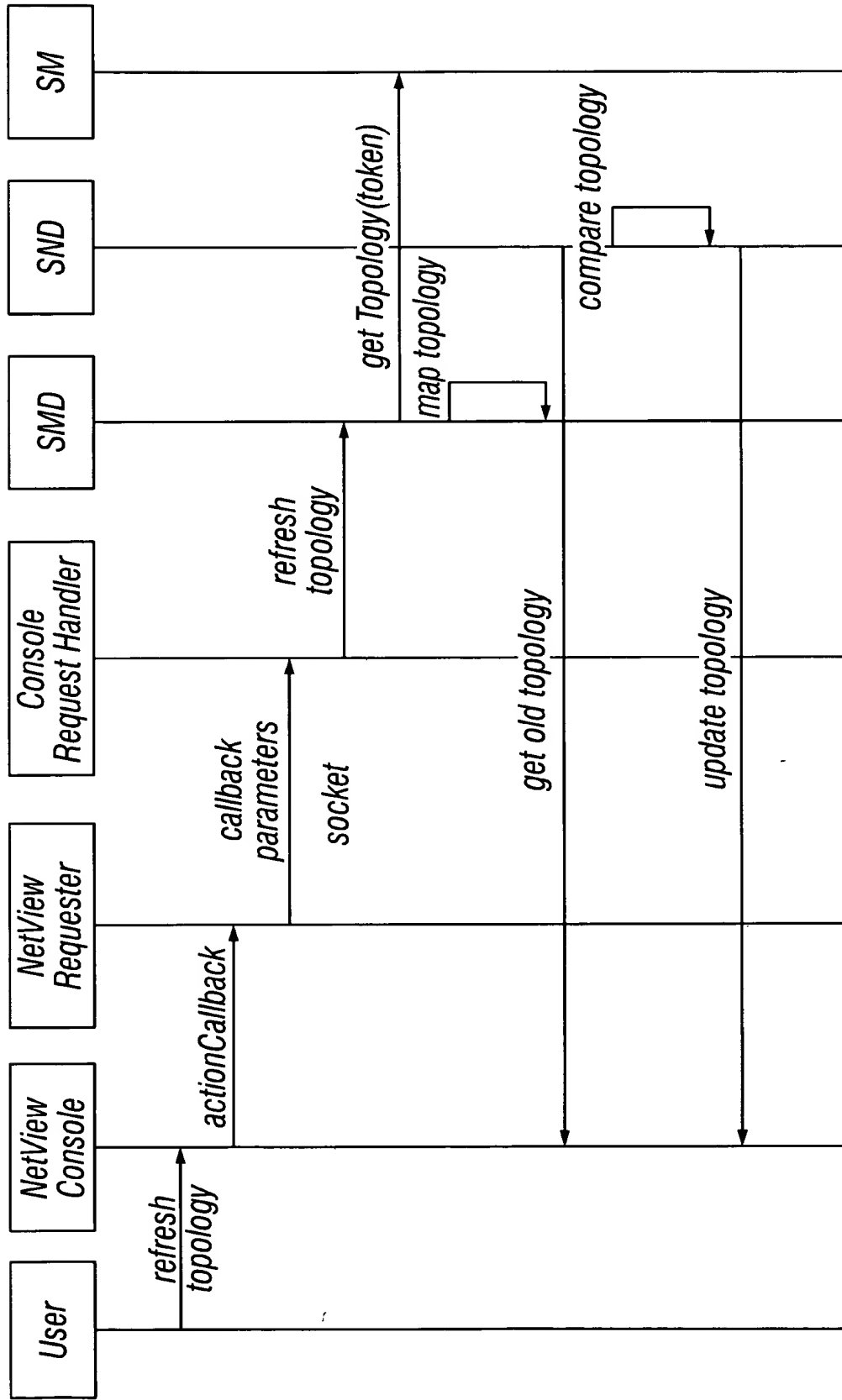


FIG. 39

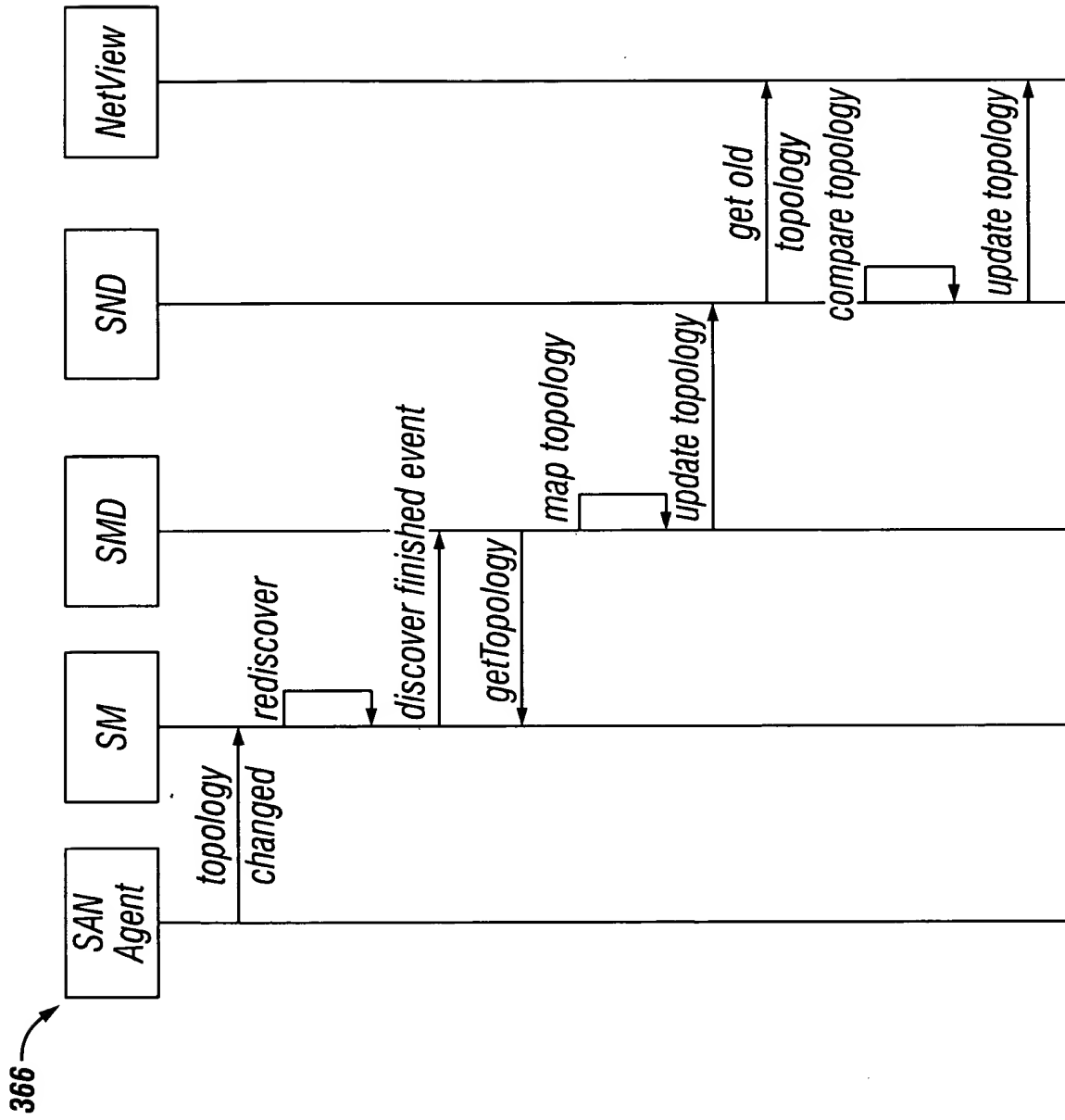


FIG. 40

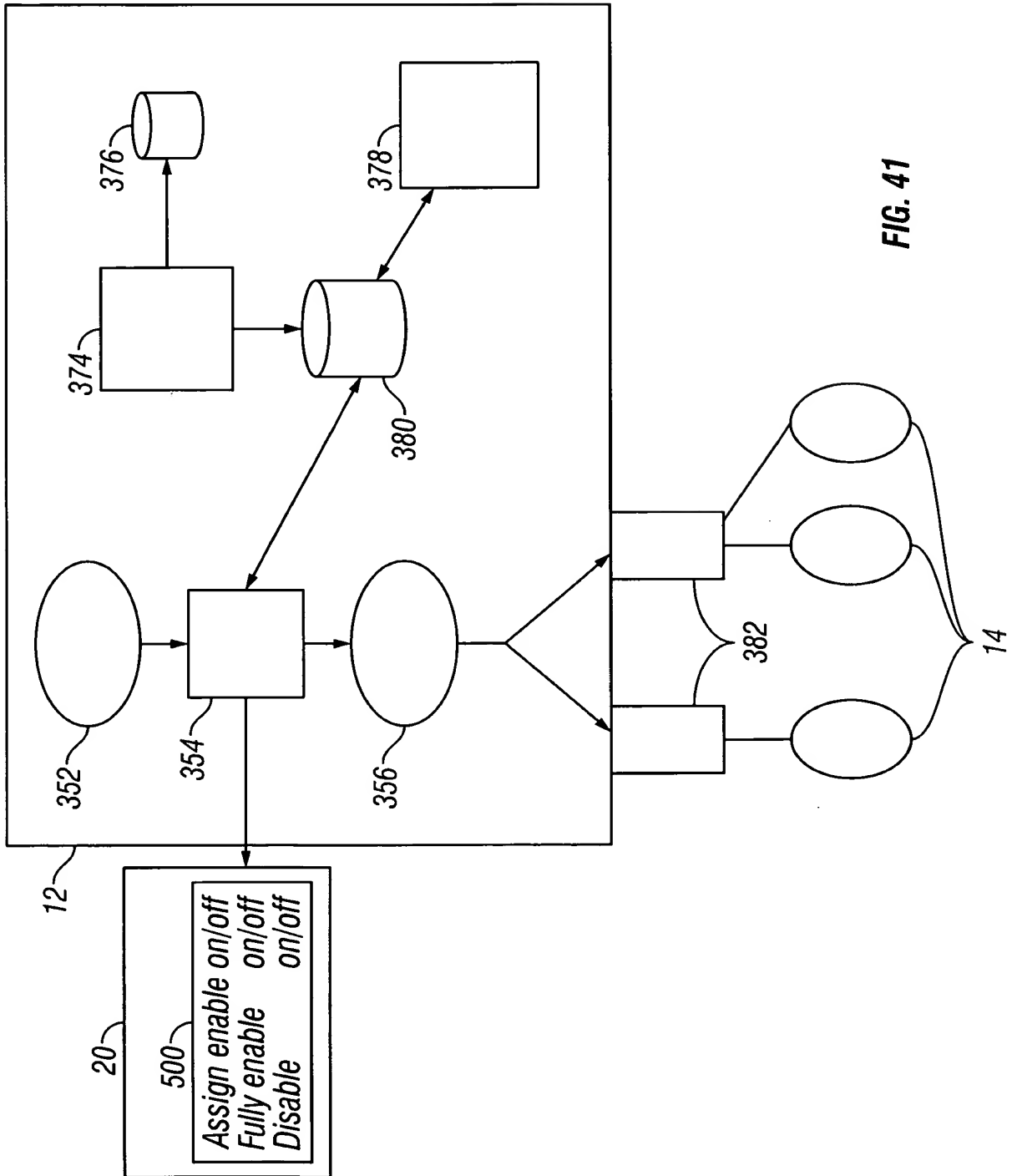


FIG. 41

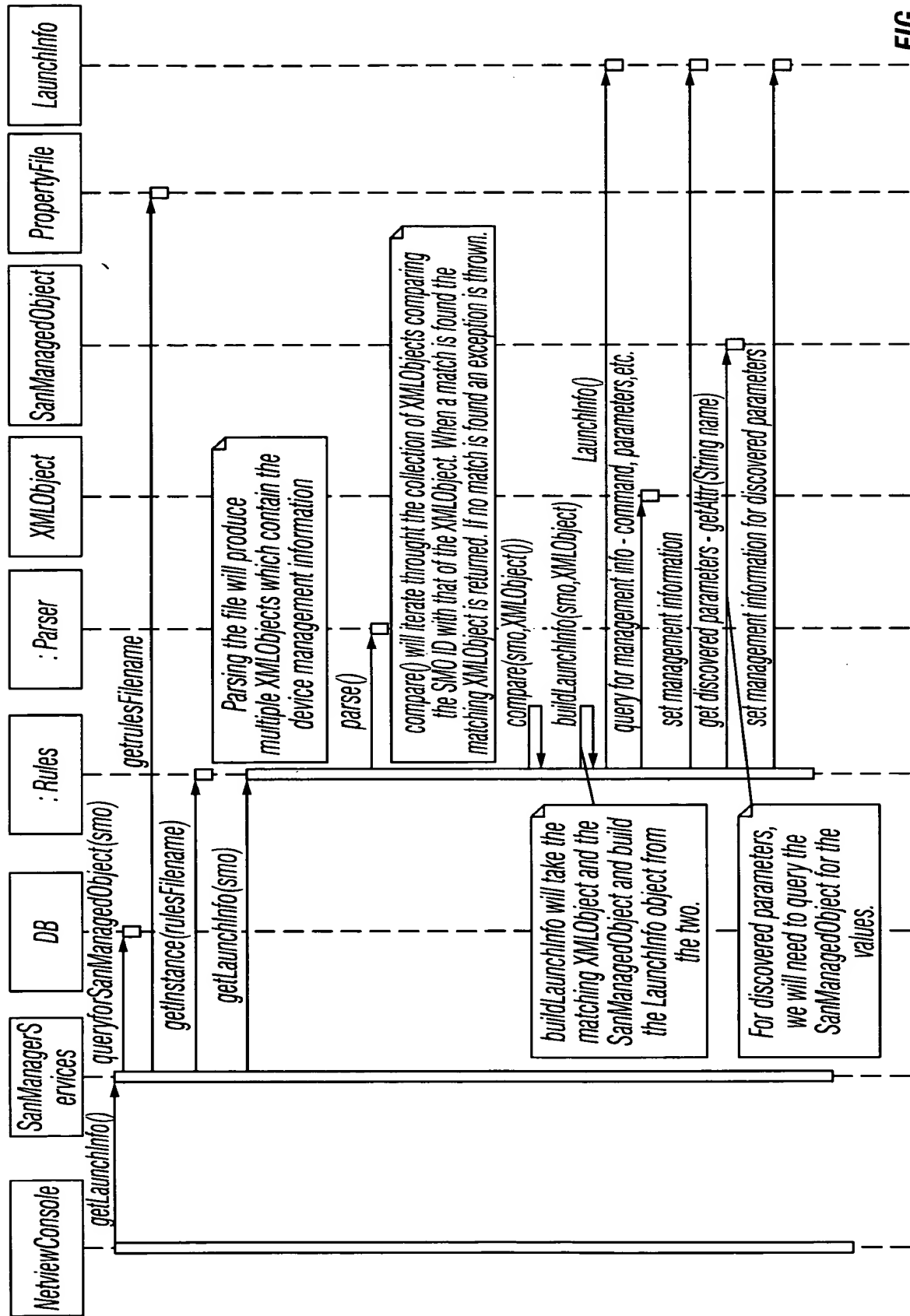


FIG. 42

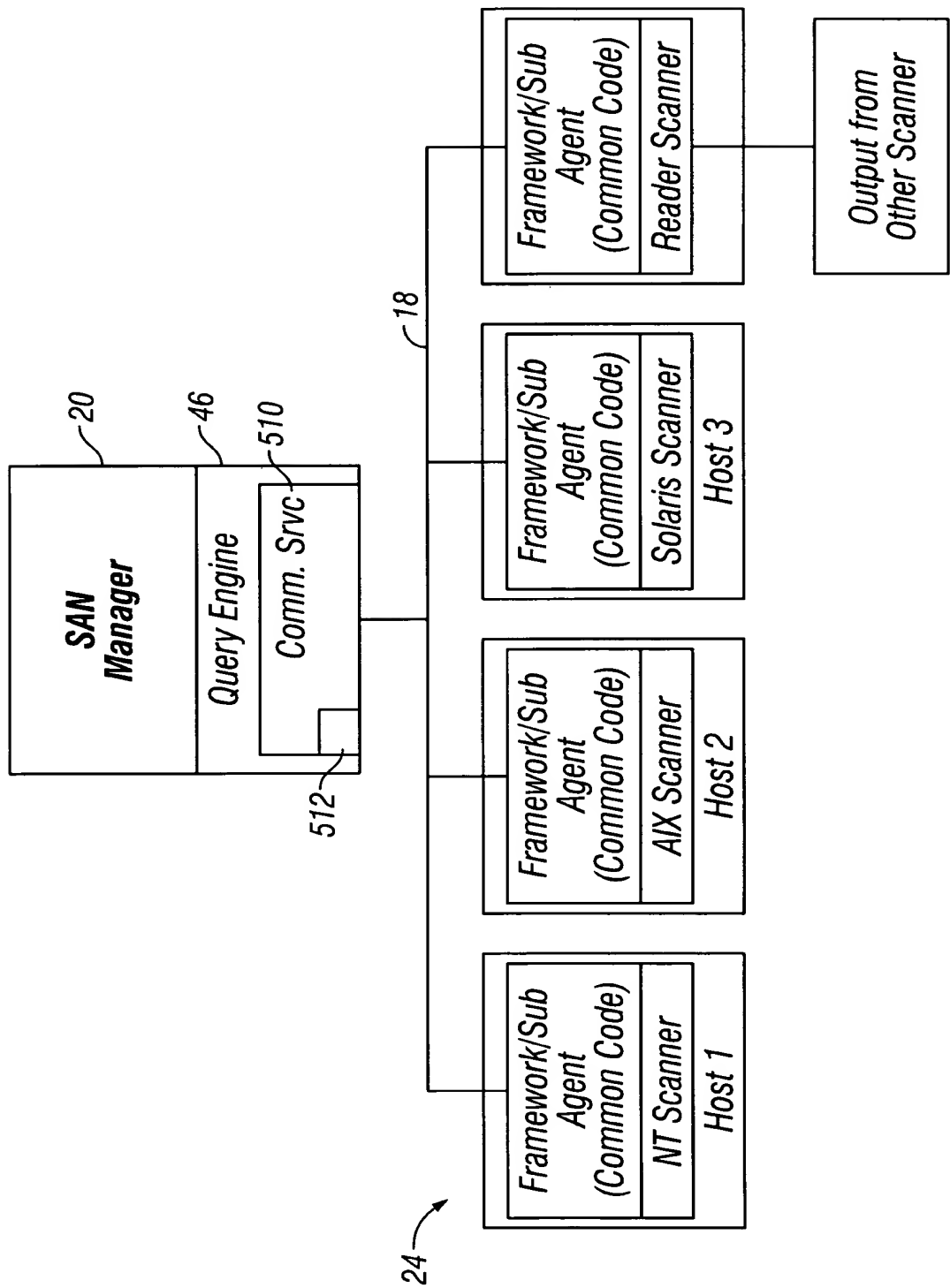


FIG. 43